Analysis of Fire Services Contractual Issues

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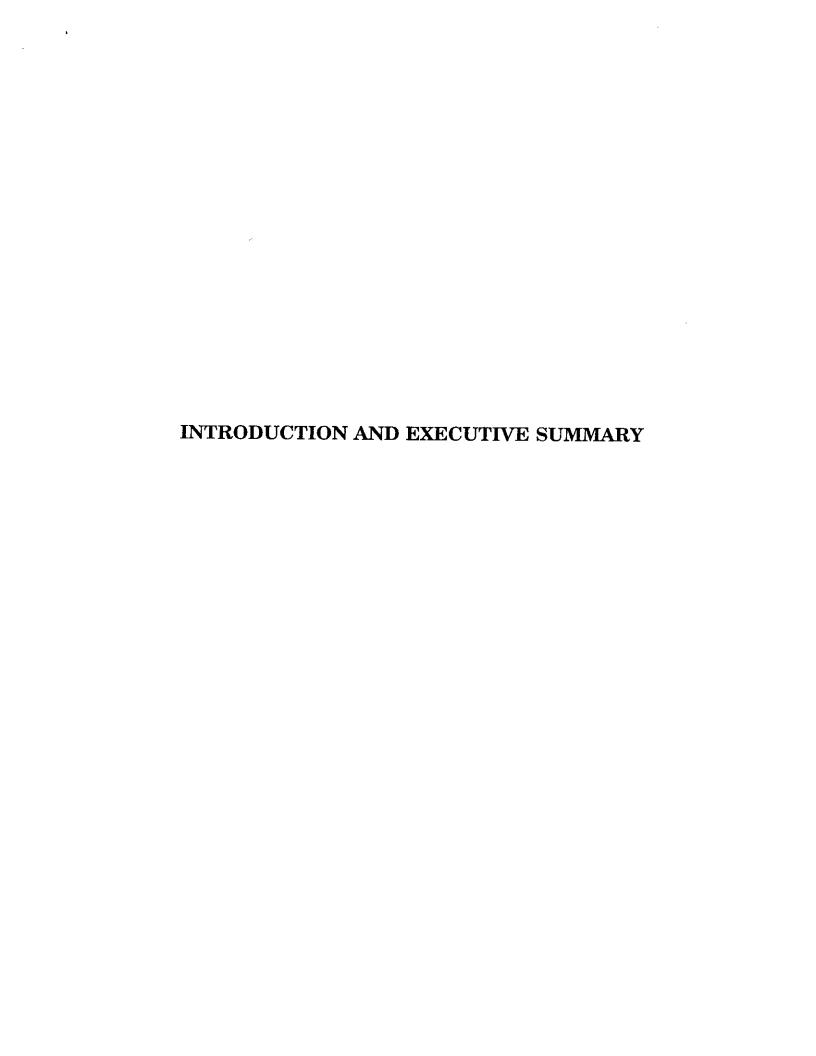
CITY OF SCOTTSDALE, ARIZONA

MAXIMUS Waltham, Massachusetts

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TABLE OF CONTENTS

	INTRODUCTION AND EXECUTIVE SUMMARY	1
I.	ANALYSIS OF THE COST EFFECTIVENESS OF ESTABLISHING AND OPERATING A MUNICIPAL FIRE DEPARTMENT	6
II.	EVALUATION OF THE STRUCTURE OF THE CONTRACT BETWEEN THE CITY OF SCOTTSDALE AND RURAL / METRO FOR FIRE SERVICES	53
	APPENDIX:	
	BEST PRACTICES EVALUATION OF FIRE AND EMERGENCY MEDICAL SERVICES PROVIDED IN SCOTTSDALE BY RURAL/METRO	65



INTRODUCTION

The report, which follows, summarizes the results of five months of data collection and analysis of fire service alternatives for the City of Scottsdale, Arizona, including current services being provided and potential future alternatives. The project team which conducted this study thoroughly reviewed the services currently provided by Rural / Metro, and analyzed potential improvements associated with the current service approaches as well as analyzed the feasibility of the City creating a municipal department. Since the beginning of the study in August, 2001, the study team has conducted its evaluation of fire services in Scottsdale using the following approaches:

- Maximizing the input of Rural / Metro staff: During this project, members of the study team interviewed all command staff in Rural / Metro as well as staff with unique responsibilities for program performance. Moreover, many line staff were interviewed throughout the process in group station interviews.
- Developing input and guidance from the City, including Council members and citizens: The project team met with City Council members early in the project. The intent of these meetings was to gain insight into historical and service issues related to City fire service needs and capabilities. In addition, input was received from citizens through a survey of about 500 recent recipients of fire service. The project team also solicited written and e-mailed input from citizens into the process. The results of this survey are contained in Attachment B, at the conclusion of the public report regarding the delivery of fire services.
- Throughout the project, the study team has met with a Cityestablished project steering subcommittee as well as Rural /
 Metro management staff to review progress and key issues
 which arose during the process: There was an internal group of
 City staff who made up the project steering committee. While the
 project team met approximately monthly with the committee, the
 meetings were interim report-driven so that actual products were
 reviewed.

• The study team has been heavily involved in detailed data collection and analysis of workloads and service levels which characterize operations and services provided by Rural / Metro to the City of Scottsdale: The focus of data collection was to understand fire service workloads and service levels. This data collection was also a base to aid in the formation of possible alternatives available to the City. The principal product of the project team's data collection, a "profile" of services provided by Rural / Metro to the City of Scottsdale is contained as Attachment A, at the conclusion of the public report regarding the delivery of fire services.

The purpose of this study was to evaluate the services currently being provided by Rural / Metro to the City, as well as to identify and analyze fire service alternatives for the future. This study helped to frame these choices through:

- Analysis of the use of current resources: A key objective of this project was to assess the effectiveness of the current contractual arrangement the City has with the Rural / Metro. This objective was designed to address the question of whether the current arrangement provides an appropriate structure on which to base future City fire services. This analysis is contained in a report that is available to the public. This has been provided under separate cover.
- Providing the tools to assess current and future needs: The project team has used a number of methodologies and approaches to evaluate fire service alternatives. Because the needs of the community may change in the future, the project team has attempted to show the methodology needed to recreate this analysis. Part of this evaluation included the use of a computerized fire station location model that can continue to be used to evaluate fire service alternatives.
- Analysis of the strengths and potential improvements associated with each alternative, at different stages of the process: Because this study focused on a number of fire service alternatives, it was necessary to illustrate the advantages and disadvantages of each alternative. These alternatives included
 - Internal changes to the way in which Rural / Metro provides services.
 - Opportunities to improve the contract upon which services are based.
 - Feasibility and cost effectiveness of creating a municipal department.

This report summarizes the results of these analytical efforts and provides implementation steps that the City should consider when addressing future fire service needs.

EXECUTIVE SUMMARY

MAXIMUS does not recommend that the City of Scottsdale move to take over the delivery of fire services from Rural / Metro at this time. The project team believes that the following points support this conclusion:

- Current service delivery by Rural / Metro meets or exceeds most of the best management practices identified by the project team. This indicates that the City is receiving a generally high level of service.
- Those issues that have been identified by the project team can be fixed by Rural / Metro, resulting in even higher levels of service in the City.
- These include issues regarding training, management systems and the way in which the relationship between the City and the Company is managed. The project team believes that the City should require Rural / Metro to take the following steps:
 - Hire a Captain level position to plan, develop, coordinate and oversee training of on-duty personnel for suppression skills maintenance. This same position is also recommended should the City take over provision of the fire service. The cost for this position is estimated to be \$105,000 including salary and benefits.
 - Develop an on-duty training approach that uses a pre-determined rotation of skills. These training sessions should be developed centrally with the intention of providing them in a decentralized fashion (i.e., training staff develop the programs which are then delivered by on-duty officers and other personnel).
 - Integrate this training into the regular day of the on-duty personnel. This should include one to two hours of training for every shift worked. The project team has provided a recommended approach to training that uses 28 topics (these could be supplemented by additional topics) to be used in rotation several times each year. Adoption of a locally developed plan based on this approach would be equally appropriate.

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- The expense of taking on the delivery of fire services would exceed current costs by more than \$1 million on an annual basis (assuming a continuation of the 60 hour workweek and debt costs for fire as well as an estimate as to the impact on other departments in the City).
- There are some critical caveats to this recommendation, however:
 - Costs under Rural / Metro are likely to trend towards the costs estimated by MAXIMUS over time. The reasons for this include 1) a shift towards a work—schedule for line personnel with fewer hours than currently and 2) the need to maintain pace with other valley communities (some pay parity has been given up to gain the shorter workweek).
 - The City will continue to acquire the major capital stock associated with the fire service including stations and apparatus. As this continues, the cost of capital financing for the transition will continue to decline.
- The contract can be modified to give the City more control over the service levels provided by Rural / Metro than currently. The current approach of basing the new budget amount on prior expenditures does not provide for sufficient control over the programs and services delivered. MAXIMUS recommends that the City enter into a new approach of "cost plus" where the service levels are defined and then a negotiated level of profit is included in the annual contract. It is likely that this will result in more expensive service however, it will also remove the incentive that Rural / Metro currently has to provide the minimum level of service possible while remaining in compliance with the gross requirements of the contract.

The City should also take some comfort in the feasibility analysis and other findings in this report. These include the following:

- The project team has shown that the City could start providing fire services on its own for just over 9.7% more than the current contract amount (excluding the first year transition costs). This gap is likely to close as time goes by (as discussed, above). This assumes the continuation of the 60 hour workweek a shift to a shorter workweek would have a correspondingly higher cost.
- The project team has recommended a number of changes to the way in which the contract with Rural / Metro is approached. These have been addressed in detailed in the second chapter of this report.

Page 5

The project team has provided more detailed analyses, findings and recommendations in the body of the report. The first chapter, that follows, provides our analysis of the delivery of services by Rural / Metro.

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I. ANALYSIS OF THE COST EFFECTIVENESS OF ESTABLISHING AND OPERATING A MUNICIPAL FIRE DEPARTMENT

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This chapter estimates the costs of establishing and operating an in-house fire department in lieu of contracting with Rural/Metro for the City of Scottsdale. The chapter opens with a description of the major assumptions employed to analyze capital, other start-up, and operating costs for a City Fire Department.

1. MAJOR PLANNING ASSUMPTIONS EMPLOYED TO DEVELOP A MODEL FOR AN IN-HOUSE FIRE DEPARTMENT.

The matrix, which follows, outlines the major planning assumptions employed to structure and estimate the costs of an in-house fire department.

Planning Element	Planning Assumption			
Uniformed Staff Compensation	Uniformed staff for a Scottsdale Fire Department would have a compensation schedule aligned with uniformed/sworn staff of the Scottsdale Police Department in the same proportion as the relationship between police and fire staff compensation in other Valley cities which have in-house police and fire departments.			
	Internal relationships between and among uniformed positions for an in-house Scottsdale Fire Department would mirror internal relationships between and among uniformed fire positions in other municipal fire departments in the Valley/Scottsdale area.			
Non-Uniformed Staff Compensation	Projected by employing existing positions currently included in Scottsdale's salary and compensation plan. If positions are not included in the current classification and compensation plan, salary ranges and costs were estimated by identifying relationships between these positions and other common municipal positions in other area agencies which have fire departments. Then, those relationships were applied to the City of Scottsdale compensation plan to determine compensation ranges and projected salary costs.			
Placement in Compensation Schedules for Uniformed and Civilian Staff	The levels at which positions would be compensated (e.g. average top step, bottom step, mid-range) can have substantial impact on the total projected cost of an in-house Fire Department for Scottsdale since labor costs (salaries and benefits) typically account for 80% to 90% of the typical municipal fire department operating budget.			

Planning Element	t Planning Assumption			
Placement in Compensation Schedules for Uniformed and Civilian Staff (continued)	Franking Assumption For the purposes of projecting costs for an in-house Department, we employed the following assumptions: If the City forms a Fire Department and the Rural/Metro contract is eliminated, it is logical to assume that many of the existing Rural/Metro fire fighters and fire fighter/paramedics would be hired to fill City Fire Department positions. Given training and qualification issues, a core of trained personnel would be needed to make a municipal department feasible and ensure some level of service continuity and quality. As will be discussed later in this review of key planning assumptions, uniformed and non-uniformed employees of a municipal Fire Department would receive benefits comparable to other Scottsdale employees including participation in the State of Arizona public employee retirement system — a benefit currently unavailable to Rural/Metro staff. Additionally, because of issues associated with the Company's ESOP and stock values, many Rural/Metro staff have only limited job related resources through Rural/Metro to provide retirement income. We believe it is logical to assume that the City could attract Rural/Metro employees by providing access to the State retirement system and bring employees into the City's compensation plan at a salary step which is not totally equivalent to their seniority and years of service with Rural/Metro. As a result, even though many Rural/Metro staff have significant years of service with the Company and the Scottsdale fire contract, labor costs for the initial years of an in-house Fire Department could be projected at mid-range/mid-step to reflect the potential to "trade off" transfer of seniority for salary purposes with the provision of public employee retirement benefits.			
Fringe Benefits	The analysis will assume that both uniformed and non-uniformed employees of a municipal fire department will receive benefits comparable to other City of Scottsdale employees including police officers.			
	Retirement Plan:			
	This will include coverage by the City/State public employee's retirement system. Planning assumptions employed to project costs for the benefit are as follows:			

Planning Element	Planning Assumption			
Fringe Benefits (continued)	• The City would provide retirement benefits to those Rural/Metro employees who are hired/transitioned to a municipal Fire Department as with all current City employees with each employee qualifying for coverage under the retirement plan based on years of service under the plan and with Scottsdale. Any purchase of years of service credits, if possible under the State retirement system, would be at the option of the individual employee and the City would make no financial contribution in this regard.			
	That the employer paid portion of the retirement plan contribution would be comparable to that currently paid by Scottsdale for other City employees in general, and police officers/sworn police employees in particular.			
	• The actual cost of the retirement benefit for uniformed fire personnel could not be actually determined until formal application for coverage was made to the Arizona Public Employee Retirement System (PERS) and an actuarial analysis performed by that agency. As a result, the operating cost analysis contained in this report utilizes the average of costs for other Arizona Fire Departments as a proxy measure.			
	Other Benefits and Pays: Assumptions were as follows:			
	• Fire Fighter/Paramedic: Fire fighter paramedics would be established as a separate classification with the proportional spread between fire Fighter and fire fighter/paramedic based on a survey of fire department compensation plans in the Scottsdale area. The analysis projects costs based on limiting the number of positions authorized to receive the paramedic incentive to the positions necessary to deploy paramedics on each response unit.			
	Other Employer Paid Benefits: Determined and costs estimated based on current Scottsdale policies and coverages provided for employees. This includes insurances, longevity pay, educational incentives, and the like.			
Operating Expenses	Operating expenses were estimated based on our previous experience in documenting operating expenses as a percent of total salary and benefit costs for comparably sized departments. This excludes capital purchases and additional annual expense related to capital costs such as lease payments for apparatus and other major equipment items required to establish the in-house Fire Department and any reserves for equipment replacement which have been estimated and presented separately.			

Planning Element	Planning Assumption
Emergency Medical Service	A key issue associated with establishment of an in-house Fire Department involves how emergency ambulance/transport service would be provided. Currently, the ambulance service provided by Rural/Metro is fee for service supported with revenues generated by collections for both emergency response/transport by ambulances as well as routine transports like inter-facility transports. In total, the EMS operation for Scottsdale generated approximately \$6.1 million in revenue for Fiscal 2000 – 2001 with an estimated 11.2 % pre-tax operating margin.
	If the City were to establish an in-house Fire Department, a key assumption involves how this service would be provided. Related issues involve the following:
	• Currently, Rural/Metro Scottsdale based EMS units are employed as an integral component of the structure fire response and fire-firefighter paramedics and EMT's are deployed interchangeably on fire and ambulance units. If this service was "severed" from the basic Fire Department and either continued as a Rural/Metro service apart from the Fire Department, it is unlikely that personnel assigned to ambulances would continue to be trained and qualified as fire fighter/paramedics and fire fighter/EMT's and would probably not:
	- Be employed as fire fighters at the incident scene in the event of a structure fire situation.
	- Be interchangeably assigned between ambulance units and other fire response units.
	• While specific data are not available, it is clear that much of the revenue generated by Scottsdale based EMS services are related to non-emergency transports. Few cities that provide ambulance services as part of their EMS program provide non-emergency or routine transports. Unless Scottsdale chose to enter the ambulance business at a level comparable to the current Rural/Metro program, significant portions of revenues generated by the program and used to offset cost of not only ambulance services but also the cost of paramedic salary differentials and other ALS related costs associated with fire response units would no longer be available to the City to offset service costs. Conversely, if routine transports were not provided, it might be possible to deploy fewer ambulance units and still meet response time effectiveness targets for the two-tier response system.

Planning Element	Planning Assumption		
Emergency Medical Service (continued)	Based on the recent financial performance of Rural/Metro and other companies heavily involved in the ambulance service business, it is clear that it is becoming increasingly difficult to collect revenues that cover costs for most facets of emergency medical services. Given the increasing complexity and risks of the business, it is clear that replacing Rural/Metro as the emergency medical service provider in Scottsdale could provide a major risk and cost exposure to the City.		
	Given the above, the Project Steering Committee determined that the key planning assumptions related to emergency medical services would be as follows:		
	Transport services would be delivered by a private provider and the City Fire Department would not provide emergency or routine transport services.		
	• Fire response units would be staffed with firefighter/paramedics to deliver Advanced Life Support Services as part of the initial or first response to emergency medical calls.		
Fire Suppression and Emergency Medical Response Unit Staffing	Three principal factors drive determining the number of staff required to staff response units: (1) The work week for shift personnel; (2) The number of response units; and (3) The minimum staffing of each response unit. Principal issues and assumptions associated with projecting staffing for an in-house Department are as follows:		
	• Response Personnel Work Week: Currently, the prevailing work week for shift personnel in municipal fire agencies in the Scottsdale area appears to be 56 hours per week. Concurrently, Rural/Metro staff work a 62 hour week and there are plans to reduce that to 60 hours for the next year. Interviews conducted during the project's initial stages indicate that Rural/Metro, working in conjunction with the union, are moving to gradually reduce the work week – negotiating tradeoffs involving limiting salary increases in return for work week reductions. If the City moved to establish a municipal fire department, the simplest assumption is that the City department, following the pattern of other municipal departments in the Scottsdale area, would employ a 56 hour standard work week for shift personnel like the other agencies. The principal implication of this decision would be to require 31% more staff to cover a 24 hour per day, seven day per week position than needed under the 62 hour work week for shift personnel currently utilized by Rural/Metro. From the perspective of projecting an in-house Fire Department, we believe that automatically assuming a 56 hour work week is not necessarily a valid planning assumption.		

Planning Element	Planning Assumption
	Table 1 and
Fire Suppression and Emergency Medical Response Unit Staffing (continued)	As noted previously, establishment of a municipal fire department would very probably involve hiring a number of current Rural/Metro staff who currently work a 62 hour schedule. Concurrently, if transitioned to a Scottsdale municipal Fire Department, those personnel would recognize a number of advantages including access to a public retirement plan and potentially, some increase in compensation based on Scottsdale's salary structure compared to the local government market in the Valley area. Given these potential advantages, it would seem that the City would have some leverage related to the work week. More specifically, we believe it would be a practical assumption that the City could maintain the 62 hour work week if the advantages noted above are provided and still attract trained personnel from Rural/Metro. As a result, we employed the planning assumption that an in-house department could employ a 62 hour work week for shift personnel during the initial years and then feature a reduction to a 56 hour week staged over a five to seven year period.
	• Number of Response Units: Overall, with the exception of the emergency medical transport unit issue previously discussed, we have found that the number of stations and response units currently deployed is reasonable and that the analysis of the cost and structure of a municipal fire department should not assume addition of new stations or basic response units.
	• Response Unit Staffing: Surveys indicate that the predominant staffing pattern for municipal fire departments in Arizona serving urban areas like Scottsdale is four person engine and truck companies. Rural/Metro currently deploys three person units at single engine company stations and a combination of three and two person units at multi-company stations, utilizing 24 hour fire inspectors to "fill-out" two and three person engine companies and dispatching the two person ambulances on multi-unit fire calls. Given the level of built-in protection in Scottsdale, we believe it is practical to project three person engine and truck companies for an in-house Fire Department. While there has been much discussion of the four person engine company issue through NFPA, there is no mandate that engines and trucks be staffed at this level.
Reserve Program	Rural/Metro currently maintains an extensive reserve program and utilizes reserves, once qualified, to cover shifts if full-time paid staff are not available. We assumed that a municipal Fire Department would retain the Fire Support Group, and utilize this program to provide reserve type personnel.

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Planning Element	Planning Assumption			
Communications and Dispatch	The analysis assumed that fire and emergency medical service dispatch would be provided through a combined police/fire dispatch center operated and managed by the Scottsdale Police Department. The analysis presented later in this chapter reflects the following: • Staffing impact of incorporating fire and emergency medical			
	dispatch into the police communications center including number of fixed posts required for fire and emergency medical dispatch (e.g. console and call taking positions); total staffing additions necessary to cover those positions; and impact on onshift supervisory staffing needs as well as center management to absorb training and management requirements associated with the expanded responsibility.			
	Hardware, software, and facility implications of expanding the center to handle fire dispatch including CAD implications and estimated start-up and maintenance costs.			
Fire Administrative Facilities	We assumed that the City has no current space available to accommodate Fire Administration, and that office space would need to be leased at prevailing rental rates for basic mid-range quality office space in Scottsdale.			
Impact of An In- House Fire	Impact on additional staff necessary was estimated as follows:			
Department on City Support Departments and Relayed Incremental	Vehicle maintenance: Incremental staffing needs based on estimates of the Fleet Manager, and costs associated with vehicle maintenance based on application of current rental rates for comparable equipment.			
Staffing Needs and Costs	• Human Resources, Finance, Legal Services, and Purchasing: Determined current staffing and composition including number of employees currently supported. Determined support staff/employees supported rations by major support function through interview with support staff department heads and other key managers. Determine the number of additional staff which would need to be supported with establishment of an in-house Fire Department. Used the resulting ratios to estimate incremental staffing needs for each principal in-house support service function based on projected staffing levels for an in-house fire department. Reviewed projected in-house staffing impact with support service managers and adjust as appropriate based on that review.			

Planning Element	Planning Assumption
Apparatus and Major Equipment Needs (continued)	Currently, Scottsdale owns most but not all of the first line apparatus (engines and trucks) utilized to provide fire service by Rural/Metro (with plans to complete the ownership transition in the near future). The in-house department feasibility analysis assumed that if an in-house Department is established, sufficient apparatus and other vehicles will be on hand to provide service continuity. Basic assumptions were as follows: • Apparatus: Identified additional units which would need to be acquired and estimated cost in conjunction with the Fleet Manager. • Other Vehicles: Assumed that other vehicles (sedans, vans, and if the scenario involves delivery of emergency medical transport) would be either purchased or leased depending on City approaches for acquiring other vehicles like police cars.

The next section projects organization and staffing for a City Fire Department.

2. THE CITY FIRE DEPARTMENT WOULD REQUIRE A MINIMUM OF 168 UNIFORMED AND NON-UNIFORMED PERSONNEL.

This section projects the organization and staffing for an in-house fire department for Scottsdale. The first sub-section projects the deployment and staffing of response units.

(1) All Response Units Would Be Staffed with a Minimum of Three Personnel and Would Be Deployed in a Two Battalion Structure.

As noted in the preceding section, our analysis indicated that the current distribution of response units and stations was reasonable and would be maintained if an in-house Fire Department were established. We have also assumed that some adjustments in company staffing would occur and those are noted in the matrix which follows on the next page:

Current and Proposed Station and Unit Staffing

			Current	7 10 00
Station	Calls/Runs	Apparatus	Staffing	Proposed Staffing
810	Runs E81 0 - 1,235 E808 - 4,871 E809 - 3,082 Calls 8,139	Three First Line Engines (810,808,809)	E810 – 3 E808 – 2 E809 – 2 plus DFM Two Ambulances with 2 Each.	Three engine companies, each with three. Elimination of the ambulances as an integral part of the fire response supports increase in minimum engine company staffing to three for all units. Call volume and unit responses support need for three units.
811	Runs E811 – 3,196 L811 – 1,200 Calls 2,534	One First Line Engine (811) One First Line Ladder (811)	E811 – 2 L811 – 3 One Ambulance with 2.	One engine company, one truck company, each with three. Again, E811 minimum staffing increased from two to three personnel.
812	Runs E812 - 2,750 CH812 - 176 Calls 3,325	One First Line Engine (812) One Airport Foam Unit (812)	E812 – 3 plus Deputy Fire Marshal (DFM). CH812 - 1	One engine company with four – dual purpose company with airport response coverage. DFM utilized as dedicated fire prevention personnel working 40 hour work week and dual use of DFM's as inspectors and engine company personnel working 24 hour shifts is eliminated.
813	Runs TR813 – 2,537 Calls 2,550	One First Line Truck (813)	TR813-3 plus DFM One Ambulance with 2.	One truck company with three. DFM reverts to 40 hour fire prevention specialist as noted above.

Station	Calls/Runs	Apparatus	Current Staffing	Proposed Staffing
814	Runs E814 – 2,476 HM814 – 18 Calls 2,503	One First Line Engine (814) One HazMat Unit (HM 814)	E814 - 3 - also HazMat trained and deployed One Ambulance with 2.	One engine company with three. Continues to functions as HazMat unit.
815	Runs E815 – 931 Calls 573	One First Line Engine (815)	E815 – 3	One engine company with three.
816	Runs E816 – 1,251 E827 – 119 Calls 665	Two First Line Engines (816, 827)	E816 - 3 E827 - 3	One engine company with three.
818	Runs E818 - 1,576 Calls 1,262	One First Line Engine (818)	E818 – 3 plus DFM	One engine company with three. DFM reverts to 40 hour fire prevention specialist as noted above.
819	Runs E/YR819 – 1,437 Calls 1,097	One First Line Engine (819)	E819 – 3 also SORT trained and deployed. One Ambulance with two.	One engine company with three. Would continue as a SORT trained unit.
820	Runs E820 – 642 Calls 221	One First Line Engine (820)	E820 – 3 plus seasonal staff during high fire season.	One engine company with three.
827	N/A	N/A	None – to be staffed with second engine company currently assigned to Station 816.	One engine company with three – staffed when the station is opened. with E 827.

The response unit deployment plan shown in the previous matrix reflects the following:

- Deploying all first line response units with three personnel at all times.
- Eliminating ambulance units to reflect that transport services would be provided by a private ambulance company.
- Eliminating Deputy Fire Marshals as 24 hour shift staff and instead, utilizing them as dedicated fire prevention specialists working a standard 40 hour work week.
- Assigning one firefighter/paramedic to each response unit to provide ALS level services with each first responder.
- Maintaining a two battalion structure given the number of stations; response units deployed: and the geographic configuration of the service area.

Given the deployment plan outlined above, fire suppression and emergency medical unit staffing would be as shown in the next table.

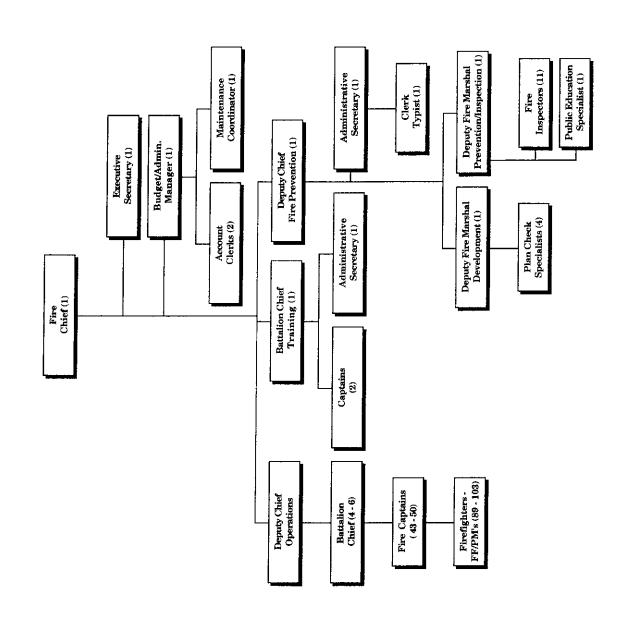
		Total Positions Required		
Position	Deployed Daily	60 Hour Work Week	56 Hour Work Week	
Battalion Chief	2	4	6	
Captain	14	43	50	
Firefighter/PM	14	43	50	
Fire Fighter	15	46	53	
TOTAL	45	136	159	

The total positions required columns reflect the impact of alternative work week assumptions on total emergency response staffing needs.

(2) <u>If Established, a City Fire Department Would Need to Be</u> <u>Organized and Staffed as a Stand-Alone City Department.</u>

The organization chart, which follows this page, outlines our conclusions about how a City Fire Department would be organized and staffed.

Plan of Organization for a City of Scottsdale Fire Department



The matrix which follows outlines the responsibilities of proposed positions and assumptions underlying the various positions proposed for the in-house fire department.

Position Number		Description			
Administration					
Fire Chief	1	Department head position.			
Administrative Secretary	1	Administrative and clerical support to the Chief and the Deputy Chief, Operations.			
Budget and Administrative Officer	1	Department financial manager, comparable to the Department Advisor position which coordinates finance and administrative issues assigned to other major departments in Scottsdale. Handles budget, purchasing, financial issue coordination with other department staff, and other related administrative measures.			
Account Clerks	2	Process payroll and other financial transactions. Provide administrative and clerical support as required.			
Maintenance Coordinator	1	Coordinate apparatus and other equipment maintenance with Fleet Management and Maintenance. Shuttles vehicles; delivers supplies to fire stations; and accomplished other related support activities as assigned.			
Operations					
Deputy Chief, Operations	1	Serves as second in command to Fire Chief. Directs all aspects of field suppression and emergency medical services operations. Coordinates fire department communications services and issues with the Police Department. Directly oversees shift battalion chiefs.			
Battalion Chiefs	4 to 6	Provide management/supervision of fire suppression staff and incident command in the event of major incidents. Two battalion organization with each Battalion Chief overseeing 7 emergency response units. Total number required depending on work week assumption for suppression/emergency medical response unit staff. Under 60 hour work week assumption, staff would be deployed under two team structure. With a 56 hour work week, a three team structure would be utilized.			

Position	Number	Description			
Fire Captains	43 to 50	Fourteen companies deployed with minimum staffing of three. A fourth position assigned to Airport station to			
Fire Fighter/		provide response coverage/capability for crash equipment at			
Paramedic	43 to 50	all times. Each company would include firefighter/			
Firefighter	46 to 53	paramedic on duty at all times to deliver Advanced Life Support capability for all responding units. Number of			
- 1. C. Mg. 1. C.	10 00 00	staff projected relates to different work week assumption as follows:			
		• 60 Hour Work Week: Availability factor of 3.04 for each fixed post requiring 24 hour staffing coverage.			
		• 56 Hour Work Week: Availability factor of 3.54 for each fixed post requiring 24 hour staffing coverage.			
Training					
Battalion Chief	1	Develops and coordinates implementation of training program for the Department. Includes suppression and EMS certification and qualification.			
Captains	2	One would assist the Battalion Chief with suppression training including developing/conducting individual and units competency testing, and program development.			
		One would serve as EMS coordinator and handle paramedic level training and certification; coordination with external agencies; and quality control reviews. Would also work with Police Department communications on EMS dispatch issues and training.			
Administrative Secretary	1	Clerical support to training and maintenance of training and certification records.			
Fire Prever	ntion				
Deputy Chief, Fire Marshal	1	Manage the City and the Department's fire prevention program including coordination with other City development review/control agencies. Responsible for recommending changes in fire related codes and ordinances.			
Assistant Fire Marshals	2	One would oversee Fire Department staff assigned to the City's development review center, and take the lead on complex plan reviews.			

Position	Number	Description
Assistant Fire Marshals (continued)		One would manage the Fire Department's inspection program and staff.
Plan Check Specialists	4	Review and analysis of development and building plans. Same as current staffing under Rural/Metro.
Fire Inspectors	11	Deputy Fire Marshal 24 hour shift personnel are replaced by 40 hour personnel. Currently, 12 Deputy Fire Marshals deployed by Rural/Metro to cover 4 fixed posts. The four Deputy Fire Marshal positions generate 1,460 "inspector days" when the current shift working day is considered (day-time inspection time versus evening hours when DFM's revert to engine company assignments. Assuming 85% net availability, would require 6.6 (assume 7) inspector positions to provide the same number of inspection days. Also provides for the 4, 40 hour per week inspectors
Public Education Specialist	1	Develop, present, and coordinate the presentation of prevention oriented fire and emergency medical service public education programs.
Administrative Secretary	1	Administrative and clerical support of fire prevention staff and operations.
Clerk Typist	11	

The next table summarizes uniformed and civilian/non-uniformed staffing projected for the in-house Fire Department:

	Number Projected				
Position	56 Hour Work Week for Suppression Personnel	60 Hour Work Week for Suppression Personnel			
Uniformed Personnel					
Fire Chief	1	1			
Deputy Chief	2	2			
Battalion Chief/Asst. FM	9	7			
Captain	52	45			
Firefighter/Paramedic	50	43			
Firefighter	53	46			
Plan Check Specialist	4	4			
Fire Inspector	11	11			
Uniformed Total	182	159			

	Number Projected			
Position	56 Hour Work Week for Suppression Personnel	60 Hour Work Week for Suppression Personnel		
Non-Uniformed Personnel				
Budget and Administrative				
Officer	1	1		
Executive Secretary	1	1		
Administrative Secretary	2	2		
Account Clerks	3	3		
Public Education Specialist	1	1		
Maintenance Coordinator	1	1		
Non-Uniformed Total	9	9		
DEPARTMENT TOTAL	191	168		

As can be seen from review of the information shown in the table, we project that an in-house Fire Department would require from 168 to 191 positions depending on the shift work week assumption for emergency response personnel. This total excludes additional positions which would be required to support the Fire Department in other City departments (e.g. Human Resources, Finance, Information Services) which are addressed later in this chapter.

3. AN PROJECTED ANNUAL OPERATING BUDGET FOR A CITY FIRE DEPARTMENT WAS DEVELOPED UNDER BOTH EMERGENCY RESPONSE PERSONNEL WORK WEEK SCENARIOS.

This section presents pro-forma operating budgets for a City Fire Department. Data presented in this section relate to direct costs associated with the Fire Department. A subsequent section evaluates annual cost impact on other City departments which would experience increased demand with the establishment of an in-house Fire Department.

(1) To Estimate Annual Operating Costs, It Was Necessary to Develop a Projected Compensation Plan for Fire Personnel.

Basic assumptions and approaches employed to project annual operating costs for a City Fire Department included developing a salary plan for uniformed positions to project staffing costs were as follows:

- The Human Resources Department provided us a survey of police and fire uniformed salaries for the neighboring cities of Chandler, Gilbert, Glendale, Mesa, Phoenix, and Tempe.
- Fire salary ranges were evaluated to determine proportional relationships between and among fire classification salaries.
- Then, the relationship between firefighter and police officer salary ranges was calculated.
- Then, the relationship between police officer and firefighter salaries was applied to police officer salary ranges in Scottsdale to project firefighter salary ranges within the current City salary and compensation plan. This assumes that the "market" proportional relationship between police and fire would be maintained if Scottsdale established a City fire department and a fire employee classification series.
- Then, the proportional relationships between and among fire positions documented through the market survey were employed to project salary levels for each fire position within the City of Scottsdale compensation plan.
- Compensation for non-uniformed positions was projected based on current salaries as documented in City's current salary plan.
- As noted in the Planning Assumptions section at the beginning of this chapter, all salaries were projected at mid-point.

The next table on the following page shows the salaries projected for uniformed and non-uniformed fire department staff.

Position Salary Projection Assun		Projected Annual Salary at Mid-Point	
Firefighter	Market analysis indicated that firefighter salaries averaged 93.3% of police officer salary ranges. This percentage was applied to the police officer salary range in Scottsdale to project firefighter salaries for an inhouse department.	\$44,277	
Firefighter/Paramedic	Projected at 109% of firefighter salary based on average relationship in other area fire departments.	\$48,262	
Captain/Fire Inspector	Projected at 131% of firefighter salary based on average relationship in other area fire departments.	\$57,870	

Page 22

Position	Salary Projection Assumption	Projected Annual Salary at Mid-Point
Plan Check Specialist	Projected as 110% of captain salary.	\$63,657
Battalion Chief/Assistant Fire Marshal	Projected at 176% of firefighter salary based on average relationship in other area fire departments.	\$77,795
Deputy Fire Chief	Projected as falling midway between Chief and Battalion Chief	\$92,700
Fire Chief	Survey indicated that: (1) Fire Chief salaries averaged 252% of fire fighter salaries in the other Arizona Fire Departments surveyed; and (2) Fire Chief salaries averaged 94% of Police Chief compensation in the agencies surveyed. To retain department head relationships in Scottsdale, projected the Fire Chief's salary at 94% of the Scottsdale Police Chief's salary.	\$107,605
Budget and Administrative Manager	Projected with compensation equivalent to a Department Advisor from the City's current compensation plan.	\$57,793
Public Education Specialist	Projected at same salary as a Fire Inspector.	\$57,870
Maintenance Coordinator	Projected with compensation equivalent to a Equipment Service Worker II from the City's current compensation plan.	\$32,874

As previously noted, salary costs for other positions currently included in the City's compensation schedule (Executive Secretary, Administrative Secretary, and Account Clerk) were projected at mid-range salaries for those position classifications. Based on these assumptions, Exhibit I, which follows this page, shows salary costs projected for a City Fire Department under both the 56 and 60 hour per week scenarios for the suppression staff work week.

(2) <u>Different Approaches Were Employed to Estimate Annual Operating Costs.</u>

Other major operating expenses were estimated and projected as follows:

- **Fringe Benefit Costs:** We employed the following percentages to calculate employer paid fringe benefit costs as provided by the City Budget Office:
 - Uniformed Staff: 13.78%.
 - Non-Uniformed Staff: 10.89%.
- Overtime: Although the factor employed to estimate the number of staff required to cover each fixed post without continuing reliance on overtime to cover, our experience suggests that an allowance for overtime needs to be included in any cost estimate to reflect the need to cover unanticipated and unscheduled absences. We have estimated this amount based on the actual experience of Rural/Metro for the last fiscal year (2000-2001). This amount, expressed as a percent of uniformed salaries is 7.5%.
- Operating Expense. This has been projected as 8.5 % percent of uniformed staff salaries and reflects the patterns we have documented in our analysis of comparably sized fire departments. This category excludes vehicle and apparatus rentals; charges for computers and other electronic equipment; space costs for fire department administration; costs, and cost impact on other City departments which have been projected separately. This category includes such items as utilities, materials / supplies, insurance.
- Administrative Space for the Fire Department: As noted in the Planning Assumptions section of this chapter, the City would need to lease space to accommodate fire administration and those elements of fire prevention not currently housed at the City's Development Review Center. Exhibit II, shows an estimate of space required to accommodate these functions. As shown in the exhibit, we have estimated that 11,055 square feet would be required. We have estimated that annual rental costs (including provision of custodial services as part of the lease) would be \$18 per square foot (\$1.50 per square foot monthly) for an annual total of \$198,990.
- Apparatus and Other Vehicle Rental: Costs for vehicle/apparatus rental and replacement were estimated based on rates/charges as provided by the City Fleet Manager. The next table shows estimates of vehicles required and annual rental costs associated with each major category. Since rental rates cover maintenance and replacement, we have assumed that they will cover the costs of any additional maintenance staff necessary to provide apparatus and other vehicle maintenance.

1. 60 Hour Work for Suppression Personnel

		Cost Per	Annual
Position	Number	Position	$\underline{\mathbf{Cost}}$
Uniformed Staff			
Fire Chief	1	\$107,605	\$107,605
Deputy Fire Chief	2	92,700	185,400
Battalion Chief	7	77,795	544,565
Plan Check Specialist	4	63,657	254,628
Captain/Inspector	56	57,870	3,240,720
FF/PM	43	48,262	2,075,266
Firefighter	46	44,277	2,036,742
Sub-Total Uniformed	<u>159</u>		<u>\$8,444,926</u>
Non-Uniformed Staff			
Budget/Admin. Mgr.	1	\$57,793	\$57,793
Public Info. Spec.	1	57,870	57,870
Executive Sec'y	1	39,382	39,382
Admin. Sec'y	2	34,476	68,952
Acct. Clerk	3	30,275	90,825
Mainten. Coord.	<u>1</u>	32,874	32,874
Sub-Total Non-Unif.	<u>9</u>		\$347.696
TOTAL	<u>168</u>		\$8,792,622

2. 56 Hour Work Week for Suppression Personnel

<u>Position</u>	<u>Number</u>	Cost Per <u>Position</u>	Annual <u>Cost</u>
Uniformed Staff			
Fire Chief	1	\$107,605	\$107,605
Deputy Fire Chief	2	92,700	185,400
Battalion Chief	9	77,795	700,155
Plan Check Specialist	4	63,657	254,628
Captain/Inspector	63	57,870	3,645,810
FF/PM	50	48,262	2,413,100
Firefighter	53	44,277	2,346,681
Sub-Total Uniformed	<u>182</u>		\$9,653,379
Non-Uniformed Staff			
Budget/Admin. Mgr.	1	\$57,793	\$57,793
Public Info. Spec.	1	57,870	57,870
Executive Sec'y	1	39,382	39,382
Admin. Sec'y	2	34,476	68,952
Acct. Clerk	3	30,275	90,825
Mainten. Coord.	1	32,874	32,874
Sub-Total Non-Unif.	<u>9</u>	,	<u>\$347,696</u>
TOTAL	<u> 191</u>		\$10,001,07 <u>5</u>

Estimate of Space Required for Fire Administration and Fire Prevention

EXHIBIT II

	Space		Net Square	to the second se
	Standard	N Y	Feet Required	Notes
Work Space	(square feet)	Number	Required	110003
Administration				
Chief's Office	350	1	350	Includes provision for small conference table and space.
Executive Secretary	80	1	80	_
Budget Manager	150	. 1	150	
Account Clerks	64	4	256	Provision for two work stations plus temporary help.
Waiting/reception	15/seat	8	120	Seating for eight.
Deputy Chief, Operations Office	230	1	230	
Coat Closet	20	$\overline{1}$	20	
Coffee area/alcove	40	1 [40	
Conference Room	250	1	250	Seating for eight.
File Space	8/file	10	80	
General Storage	-	-	<u>200</u>	
Administration Total			<u>1,776</u>	
Training				
Training Chief	230	1	230	
Captains	120	$\stackrel{-}{2}$	240	
Administrative				
Secretary	80	1	80	
Training Library/				
Small Training	0.00	. [260	Seats 10 plus 500 lineal
Conference Room	260	1	200	feet of shelves for training manuals/ documents
Training Room	-	1	1,500	Seating for 50 plus audio/visual projection room and materials storage.
Training Total			2,310	Door ago.
rraining rotar				

EXHIBIT II (2)

Space		Net Square	
(square feet)	Number	Required	Notes
230	1	230	
180	2	360	
80	1	80	
64	1	64	
80	11	880	
-	-	<u>500</u>	
		<u>2,114</u>	
		150	Work station at Administrative Headquarters. Shift
			BC's would work out of fire stations.
20 per seat	8	320	Includes entryway and circulation.
25 per space	Space for Ten	250	
-	1	300	
-	-	500	
		320	
		1,690	
	230 180 80 64 80 -	Standard (square feet) Number 230 1 180 2 80 1 80 11 - - 20 per seat 8 25 per space Space for Ten - 1 - 1 - 1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Standard (square feet) Number Feet Required 230 1 230 180 2 360 80 1 80 64 1 64 80 11 880 - 500 2,114 20 per seat 8 320 25 per space Space for Ten 250 - 1 300 - 500 320 1,690 1,690 1,690

EXHIBIT II (3)

Work Space	Space Standard (square feet)	Number	Net Square Feet Required	Notes
Allowance for Circulation			2,010	Estimated at 25% of net square feet.
Contingency Allowance			1,005	Estimated at 10% of net square feet plus circulation allowance.
TOTAL FACILITY SPACE REQUIRED FOR FIRE ADMINISTRATION AND FIRE PREVENTION			11,055	

Type	Number	Annual Rental Charge Per Unit	Annual Total
First Line Engine	12	\$38,525	\$462,300
Brush Truck	4	11,346	45,384
Trucks	3	53,102	159,306
Reserve Engine	2	38,525	77,050
HazMat Truck	1	23,252	23,252
SORT Truck	1	33,279	33,279
Tanker	2	29,988	58,576
Chem Unit	1	33,763	33,763
Foam Unit	1	33,763	33,763
Sedan	15	6,191	92,865
SUV	11	27,496	302,456
Pick-Up	2	10,626	21,252
TOTAL			\$1,343,246

- Dispatch and Communications: As noted in the Planning Assumptions section earlier in this chapter, we have assumed that fire and emergency medical communications would be provided by the Police Department dispatch/communications center. To analyze the impact of handling fire and emergency medical services calls on Communications Section staffing and workload, the consulting team related call for service workload with time standards developed to "build up" total dispatch related workloads. This approach is based on time standards and workload relationships developed over the last fifteen years by members of the consulting team and other research organizations. This approach consists of the following components:
 - The analytical process is based on the validated assumption that there are relationships between and among communications center workloads which are relatively constant from one agency to another. These relationships include:
 - •• The number of telephone calls received by a center compared to the various types of calls for service dispatched -- including police, fire, and emergency medical services.
 - •• The ratio between radio transmissions handled by dispatcher personnel compared to calls for service of the various types noted above.
 - • The ratio between other elements of communications center workload (e.g. administrative traffic, etc.) and calls for service of various types.

Based on actual time measurement projects in several dispatch centers, these relationships have been developed to estimate the total number of minutes of dispatcher workload which can be quantitatively linked with calls of various types. These standards include not only call for service related workload but also other workloads handled by a typical public safety dispatch center associated with administrative traffic, non-emergency telephone calls, and the like.

- These time standards include the following: For each fire, emergency medical services, and other incident handled by the Fire Department, 8.2 minutes of dispatch center workload is generated. This includes time estimates of radio, telephone, and administrative tasks generated by Fire Department communications needs. The 8.2 minutes incorporates different values for fire and emergency medical service incidents based on the proportion of those incidents in Scottsdale For emergency medical incidents, the time standard utilized incorporates assumptions related to emergency medical dispatching procedures, including pre-arrival instructions and triage assessments, comparable to those currently utilized in Sparks.
- These time standards were then applied to actual fire and emergency medical service volume for 2000 2001 to estimate the total minutes of dispatcher workload needing to be handled by the dispatch center during each hour of the day related to fire and emergency medical calls.
- To estimate the number of communications staff required to handle these workloads, our analysis is based on the assumption that each dispatcher should handle a maximum or 22 minutes of workload per hour. This amount was developed based on research that calculated the optimum amount of time to be utilized per dispatcher to avoid call build-up/queuing (given varying distributions of incoming workload during a given time period), and to provide for other activities which occur over the course of a working period such as meals, breaks, shift changes, and the like. It does not represent each dispatcher working only 30% of the time. The 22 minute time standard was divided into total fire and emergency medical service workload per hour to calculate the number of dispatchers required during each period to handle calls fire and emergency medical calls without overload. Exhibit III, which follows this page, shows the results of this analysis. The exhibit indicates that two additional dispatchers would be needed to handle fire and emergency medical calls during the period from 7 AM until 10 PM on the average day. To estimate the incremental staffing impact on the Police Department communications center, we have assumed

that two additional dispatcher positions would be required for 16 hours per day and one additional position 8 hours per day. Total additional dispatcher staffing needs generated by fire and emergency medical services workload would be as shown in the next table.

Time Period	Average Daily Staffing Needed	Number of Days Per Year	Total Shifts Required	Hours Per Shift	Total Person Hours Required
0700 - 1500	2	365	730	8	5,840
1500 - 2300	2	365	730	8	5,840
2300 - 0700	1	365	365	8	2,920
				TOTAL	14,600

Total Staff Required

- 1. Total of 14,600 person hours of coverage required.
- 2. Assume net availability per dispatcher of about 82% to include normal vacation and sick leave as well as more extended injury/illness leaves. Results in 1,700 net working hours per dispatcher position.
- 3. Total additional dispatcher positions required to handle fire and emergency medical services calls would be: 14,600 person hours required divided by 1,700 net working hours per dispatch position = 8.6 additional dispatchers needed.

EXHIBIT III

Dispatchers Required to Handle Fire and EMS Workload

	cher Dispatchers <u>load</u> <u>Required</u>	17.3 0.8				9.5 0.4		16.3 0.7				34.3 1.6	36.1 1.6		34.3 1.6	33.6 1.5	35.2 1.6		34.3 1.6	34.4 1.6	31.8 1.4	26.7 1.2		1.0
	Other Workload	0.7	0.5	0.5	0.5	0.4	0.5	6.0	1.2	1.4	1.5	1.8	1.8	1.7	1.8	1.6	1.8	1.7	1.8	1.7	1.6	1.3	1.2	60
Average Calls Per Hour Minutes of Number of Timeof Disnatcher	EMS	1.3	1.5		0.7	0.7	0.8		1.5	7	2.3	2.2	2.4	2.6	2.2	2.3	2.3	2.3	2.2	2.3	2.1	1.8	1.8	1.7
70,000	лтеот <u>Day</u>	0000-0100	0100-0200	0200-0300	0300-0400	0400-0500	0200-0600	0000-0090	0400-0800	0800-0080	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	2000-2100	2100-2200	2200-2300

For the purposes of this analysis, we have assumed that nine additional dispatch positions would be required if the Police Department communications center assumed responsibility for fire and emergency medical dispatch. It is also practical to assume that one additional supervisor position would be needed to handle training of dispatch—staff in fire dispatch and emergency medical call screening and pre-arrival instructions, and to provide the communications center sufficient supervisor positions to have 24 hour supervisor coverage on a 24/7 basis.

Given the above, incremental annual operating costs associated with expanding the Police Department communications center to handle fire and emergency medical dispatch would be as shown in the next table.

Position	Number	Salary at Mid- Point	Annual Total
Communications			
Supervisor	1	\$50,135	\$50,135
Communications			
Dispatcher	9	38,075	342,675
Salary Total			\$392,810
Overtime at 7.5% of Salarie	S		30,000
Fringe Benefits at 10.89 % of Salaries			42,777
Health Insurance at \$5,820 Per Employee			58,200
Operating Expense (estimated at 8.5% of salaries)		33,400	
Annual Total			\$557,187

• Electronic and Communications Equipment. An in-house Fire Department would incur annual charges for telephones, computers, printers, pagers, and the like. Exhibit IV, which follows this page, shows an estimate of the equipment required. The table which follows shows estimated annual operating costs as prepared by Information Systems.

Item	Annual Cost
High speed T1 connection for 11 fire stations and 1 admin	\$50,400
site	
Base Rate charge for telephone services (\$35/month each	\$39,900
phone)	
Computer Replacement fund (\$1316 x 60 computers)	\$78,960
Cell phones (25 cell phones x \$40 x 12 months)	\$12,000
Pagers (158 pagers x \$8 x 12)	\$15,168
Total Annual Ongoing Expenses	\$196,428

An allowance also needs to be provided for replacement of on-board radios, portable radios, and related equipment. The capital cost section later in this chapter provides a detailed estimate of the equipment required in this category. We have provided an annual allowance for replacement of this equipment based on a five year life cycle. That amount is \$112,272 annually.

EXHIBIT IV

Electronic Equipment Required For a City Fire Department

Electronic Equipment Needed

Cell Phones 25 $\begin{array}{c} 2 \\ 132 \end{array}$ 18 158 Pagers Mobile Lap Tops ø 0 0 14 20 61 Ø Printers 16 4 PC's<u> Telephones</u> 16 C) Operations Mgmt. Chief's Office Other Admin Station 811 Station 812 Station 813 Station 814 Station 815 Station 816 Station 819 Station 819 Station 820 Apparatus BC's Station 810 Function Prevention Training TOTAL

18

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(3) Staffing and Operating Cost Projections Were Combined to Prepare a Pro-Forma Annual Operating Budget for an In-House City Fire Department.

The staffing and operating cost projections outlined above have been combined into a <u>pro-forma</u> annual operating budget for a City of Scottsdale Fire Department. Exhibit V, which follows this page, presents the projected annual operating budget for a City Fired Department under two scenarios: (1) Assuming a 60 hour work week for suppression/emergency response personnel; and (2) assuming a 56 hour work week for suppression emergency response personnel. The exhibit shows that we have estimated that annual operations costs for an in-house Fire Department would range from \$14.7 million to \$16.4 million depending on the work week assumption.

4. OTHER CITY DEPARTMENTS WOULD ALSO NEED ADDITIONAL RESOURCES TO SUPPORT AN IN-HOUSE FIRE DEPARTMENT.

Addition of a major department to the City organization would increase workload for the City's major administrative support departments. Based on interviews with managers from the major support service units, we have estimated the impact of establishment of an in-house Fire Department on other City departments as summarized in the matrix which follows.

Department	Impact	Additional Staff Required
Fleet Management and Maintenance	While a number of vehicles will be added to the inventory under maintenance by fleet management, the cost of the additional staff have been reflected in the vehicle maintenance and rental rates previously estimated. It has been assumed that the incremental cost of staff needed to maintain the fire related apparatus and vehicles would be captured in the shop rates and maintenance charges.	Assumes that the three mechanic vacancies in Fleet would be filled and two additional positions added to provide "road" service to apparatus. All of the above would be captured in the "shop rates" and vehicle maintenance charges as estimated in the previous section.

1. Projected Annual Operating Budget With a 60 Hour Work Week For Emergency Response Personnel

<u>Item</u>	Annual <u>Total</u>
Uniformed Salaries	\$8,444,926
Non-Uniformed Salaries	347,696
Uniformed Fringe Benefits @ 13.78%	1,163,711
Non-Uniformed Fringe Benefits at 10.89%	37,864
Health Insurance @ \$5,820 Per Employee	<u>977,760</u>
Salary Total	\$10,971,957
Overtime at 7.5% of Uniformed Salaries	\$633,369
General Operating Expense at 8.5%	
Of Uniformed Salaries	717,819
Administrative Space Rental	198,990
Vehicle Rental	1,343,246
Electronic Equipment Rental	196,428
Communications/Dispatch	557,187
Radio Replacement Reserve	112,272
ANNUAL TOTAL	<u>\$14,731,268</u>

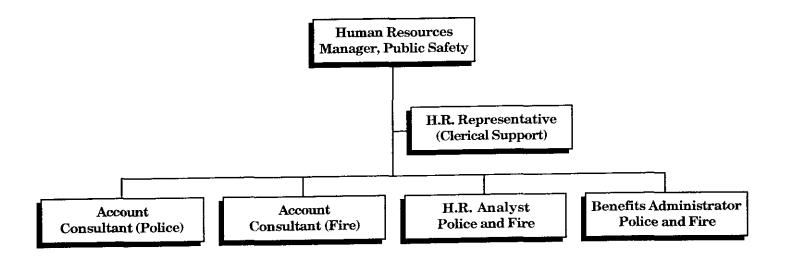
2. Projected Annual Operating Budget With a 56 Hour Work Week For Emergency Response Personnel

	Annual
<u>Item</u>	<u>Total</u>
TT 10 101 1	#0.659.970
Uniformed Salaries	\$9,653,379
Non-Uniformed Salaries	347,696
Uniformed Fringe Benefits @ 13.78%	1,330,236
Non-Uniformed Fringe Benefits @ 10.89%	37,864
Health Insurance @ \$5,820 Per Employee	<u>1,111,620</u>
Salary Total	<u>\$12,480,795</u>
Overtime at 7.5% of Uniformed Salaries	\$724,003
General Operating Expense at 8.5%	
Of Uniformed Salaries	820,537
Administrative Space Rental	198,990
Vehicle Rental	1,343,246
Electronic Equipment Rental	196,428
Communications/Dispatch	557,187
Radio Replacement Reserve	112,272
ANNUAL TOTAL	<u>\$16,433,458</u>

Department	Impact	Additional Staff Required
Financial Services	Establishment of an in-house Fire Department would add responsibility for a complicated payroll because of the fire suppression work week/schedule which is different that the standard work week covered by the City's current payroll system. The Fire Department would also add workload associated with purchasing and processing of both accounts payable and receivable. Finally, as a major department, the Fire Department would be assigned a Department Advisor comparable to those assigned to other major departments to handle budget and	One Department Advisor which has been shown in the projected Fire Department staffing plan and the Budget and Finance Manager. Two account clerks – one for payroll and one for accounts payable/ receivable would be added to the Financial Services organization. One additional Buyer to handle increased purchasing workload associated with the in-house Fire Department.
Human Resources	financial matters. Addition of an in-house Fire Department would impact Human Resources in a number of areas including recruiting and selection; benefits administration; personnel administration and labor relations. Interviews with Human Resources management indicates that establishment of an in-house Fire Department would probably result in a reorganization within Human Resources to establish a unit to serve public safety including both police and fire. Exhibit VI, which follows this page, shows how that unit would be organized and staffed.	For the purposes of this analysis, we will assume that one Account Consultant position would be generated solely by the Fire Department and the other positions would support both Police and Fire and would have their costs allocated based on the number of employees supported. This includes the HR Manager, HR Representative, the HR Analyst and the Benefits Administrator. Based on positions authorized for the Police Department in the FY 2001 – 2002 budget and the number of employees projected for the Fire Department, allocation would be as follows: Department FTE Percent Police 573 75% Fire 191 25%

EXHIBIT VI

Proposed Human Resources Public Safety Support Unit



Department	Impact	Additional Staff Required
Information Systems	Establishment of the Fire	An I.S. Consultant type position
	Department would require	would be required to provide
	information systems support related	dedicated support to the in-house
	to CAD and the Fire EMS which is	Fire Department.
	part of CAD as well as the various	
	systems and information systems	
	infrastructure as previously	
	estimated. Estimates prepared by	
	Information Systems indicates that	
	a department integrator type	
	position would be required to	
	provide the level of support	·
	necessary.	
Legal Services	Currently, the Rural/Metro fire	For the purposes of this analysis, we
	contract absorbs about 11% of one	will assume that the in-house Fire
	Assistant City Attorney's time.	Department would require about
	Legal service demands created by	50% of one Assistant City Attorney's
	the establishment of an in-house	time on a continuing basis.
	Fire Department would clearly	
	require more legal time. While	
	difficult to quantify, our experience	
	in working with other cities with in-	
	house fire departments of	
	comparable size indicates that none	
	dedicate a full-time attorney to fire	
	department issues. Generally, we	
	have found that one half of an	
	attorney or less is required to	
	support a fire department of	
	comparable size.	

Given the incremental staffing requirements for the City support departments and functions noted, Exhibit VII, which follows this page, shows our estimate of the estimated annual cost of these incremental support positions. The exhibit indicates the annual salary and benefit costs associated with these positions is estimated to be \$368,039.

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EXHIBIT VII

Projected Costs for Administrative Support Functions Generated by an In-House Fire Department

	Mid-Poin t		Annual
Department/Position	<u>Salary</u>	<u>Number</u>	Cost
Financial Services			
Account Clerk	\$30,275	2	\$60,550
Buyer	43,195	1	43,195
Human Resources			
HR Manager	57,793	0.25	14,448
Account Consultant	54,975	1	54,975
HR Analyst	54,975	0.25	13,744
Benefits Administrator	47,497	0.25	11,874
HR Representative	34,476	0.25	8,619
Information Systems			
I.S. Consultant	54,795	1	54,795
Legal Services			
Assistant City Attorney	77,491	0.5	<u>38,746</u>
Salary Total			<u>\$300,946</u>
Fringe Benefits @ 10.89%			32,773
Health Insurance @ \$5,280			
Per Employee			
			34,320
ANNUAL TOTAL		<u>6.5</u>	<u>\$368,039</u>

When the incremental annual operating costs associated with administrative and support functions in other City departments are considered, total projected annual operating costs for an in-house Fire Department are summarized in the next table.

	60 Hour Work Week for	56 Hour Work Week for
Cost Item	Suppression Personnel	Suppression Personnel
Direct Department Cost	\$14,731,268	\$16,433,458
Other City Departments	368,039	368,039
Annual Operating Total	\$15,099,307	\$16,801,497

The cost estimates presented to this point do not include capital start-up costs and those are discussed in the next section of this report.

5. CAPITAL COSTS FOR SOME APPARATUS, OTHER VEHICLES, FIRE FIGHTER EQUIPMENT, AND A NUMBER OF OTHER ITEMS WOULD BE REQUIRED IF AN IN-HOUSE FIRE DEPARTMENT WERE ESTABLISHED.

The matrix which follows estimates capital purchases required to establish an in-house Fire Department for Scottsdale.

Item	Amount
Apparatus: Over recent years, the City has purchased and directly owns much of the major apparatus including engines, trucks, and specialty vehicles like the HazMat Truck and the Airport Crash Rescue equipment. Additionally, funds are budgeted/allocated to purchase and replace additional items within the next two years. Our estimate of purchase needs for major apparatus reflect those additional items which are not budgeted for purchase at the current time and they include the following: 2 Line Engines – Assumed to be purchased new at \$ 310,000 each. 2 Reserve Engine – Assumed to be purchased from Rural/Metro at midrange of appraised price based on recent evaluation of apparatus commissioned by the City. One at \$100,000 plus one at \$80,000.	\$800,000
On-Apparatus Equipment (OEM): Assumes that City owns the OEM on the apparatus which the City currently owns including the HazMat truck and the other specialty units. OEM would need to be purchased for the two new engines and the two reserve engines noted above. OEM per engine is estimated at \$34,000 per unit and is shown in detail in Attachment A to this report.	\$136,000

Item	Amount
Headsets and Installation: Assumes already installed and owned on City owned apparatus, but would need to be purchased and installed on the four engines noted above. Equipment cost per unit is estimated at \$5,000 and installation at \$1,000.	\$ 24,000
E MS Supplies: The City Fire Department would provide ALS services from all first responding vehicles. Currently, Rural/Metro owns ALS supplies and equipment on the deployed apparatus. We have assumed that all line engines and trucks (14 units) would be equipped with ALS supplies and equipment with content and costs as follows:	
 Paramedic Level Supplies - \$20,000. Provide patient stabilization, includes I.V's., transportation equipment, on board trauma equipment, measurement equipment to monitor patient vital signs, etc. 	\$ 280,000
Other Vehicles: Command, administrative, and fire prevention vehicles	
required as follows:	\$732,160
11 SUV 4x4 at \$34,000 each 2 Pick-ups at \$21,580 each 15 Sedans at \$21,000 each	ψ.ο Ξ ,ι.οο
Radios and Laptops: The Fire Department would need to completely equip all vehicles to communicate via the 800 MHz radio system currently utilized by the Police Department. We have assumed that apparatus (engines, trucks, HazMat, SORT) and the Battalion Chiefs would have radio and Mobile Computer Terminal (MCT) capability including on-board print out of maps and response instructions. Other vehicles would have radios but no MCT or print capabilities. Our estimates are as follows:	
• Per unit for radio, MCT, and printer: \$11,650.	
• Per unit for radio only: \$4,000.	
Units required as follows:	
14 engines and trucks at \$11,650 each 1 HazMat at \$11,650 each 1 SORT at \$11,650 each 2 Tankers at \$4,000 each 2 Airport Units at \$4,000 each 4 Brush Trucks at \$4,000 each 3 BC Vehicles at \$11,650 each 1 Ops Chief Vehicle at \$11,650 each 1 Chief Vehicle at \$11,650 each 21 Sedans and SUV's at \$4,000 each	\$360,560
Portable Radios: Assume three per company plus one for the Chief, Operations Chief, Fire Marshal, Deputy Fire Marshals, four for use by Inspectors, and 3 for Battalion Chief use, plus 25% allowance for units under maintenance. Total of 68 units at \$2,600 per unit.	\$176,800

Page 40

Projected Capital Costs for Telephones, Computers, and Related Equipment As Prepared By Information Systems

1. Assumptions.

Fire Stations:

- Fire stations will need one PC and one printer to be used for administrative purposes.
- Each Fire station will require six telephones.
- Similar network connectivity (T1 line) as used for all other city off-campus sites will be sufficient to support any fire specific applications.

Administrative Location:

- All administrative functions will be combined at a single location.
- Twenty-nine phones and computers will be required.
- Three networked and four local printers will be required.
- One copier will require a network connection.

EOC

It is assumed that the EOC would be located at the Civic Center or Via Linda Civic Campus. Based on this assumption, no additional hardware or software has been included in this report.

2. One Time Capital Costs:

Voice And Data Communications

Fire Administration Location with 29 telephones, network communications equipment, voice and data cable. Voice mail for 200 users. \$30,355

Eleven (11) Fire Stations with 6 telephones each, network communications equipment, voice and data cable \$199,342

City central PBX upgrades required for expansion

EXHIBIT VIII (2)

City central software upgrades required for expansion - HDMS Server Plus Expansion to add Twelve (12) Sites and configuration and fault management software. \$16,730

Cell phones -25 Audiovox cell phones kits, includes phone, charger, battery and case.

\$1000

Total Telecommunications Capital Cost

\$265,287

Computer Hardware

Fire Administration Location with 29 computers, three network printers and four local printers \$91,500

Eleven (11) Fire Stations with one computer and one printer each. City standard computer with Microsoft office suite, back office client, and first year PC replacement costs \$36,600

Network File Server

\$7,000

Laptops- 20 City standard rugged laptops with Microsoft office suite, back office client, and first year PC replacement costs (included in previous estimate for radios and MCT's.

Total Computer Hardware Capital Cost:

\$135,100

Total Capital Costs:

\$400,387

Item	Amount
Breathing Apparatus: Unit cost of \$3,300 with air bottles included as part of OEM. Assume one for each fixed post plus a 30% "reserve" for units under maintenance. Also units for the Chief and the Deputy Chief, Operations. 62 units required.	\$204,600
Turnouts: One set for each uniformed person except plan check specialists plus 30 for reserve personnel use. Total of 208 required at \$1,260 each.	\$ 262,080
Uniforms: Assume two work uniforms purchased for each uniformed staff member. Work uniforms at \$ 850 per uniform set.	\$309,400
Fire Station Furnishings: Furniture; kitchen equipment; exercise equipment; etc. Estimated at \$80,000 per station based on recent costs for several department surveyed which have furnished new stations.	\$880,000
Telephone, Computers, and Comparable Equipment: As estimated by Information Services and shown in detail in Exhibit VIII which follows this page.	\$400,387
Communications Center Costs: Based on estimates developed in conjunction with Police Department communications managers, the following capital costs would be incurred to expand the center and its capabilities to absorb fire and emergency medical dispatch. Consoles: 2 consoles for fire and emergency medical service at \$55,000 per unit: \$110,000 CAD: License and installation for fire related software at \$10,000 per console work station: \$20,000. 911 Upgrade: Planned for spring for 9 police communications work stations for a total of \$440,000. Addition of fire work stations would be additional cost. Estimated at \$49,000 per console: \$98,000. Log-In Recorder Upgrade: Estimated at \$2,500 per recorder: \$5,000. Printers: One per console work station: \$2,000. Furniture and Headsets: Estimated at \$5,000 per work station for two consoles and two call taking positions: \$20,000. Lockers and Miscellaneous Equipment for Additional Personnel: Estimated at \$5,000. Currently, the Police Communications Center lacks space to add the additional personnel and work stations. This assumes that the planned new dispatch center will be large enough to accommodate these functions and will be planned and built accordingly.	\$260,000

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Item	Amount
Fleet Maintenance: While incremental annual operating costs are covered by projected apparatus/vehicle rental rates, some initial capital costs will be required to accommodate maintenance of all fire vehicles. They are estimated as follows:	
• Increase Part Storage Space: Estimate 2,500 square feet required at \$75 per square foot for warehouse type space: \$187,500.	
• Tools: Estimated at \$10,000.	
• Above Ground Lifts: Two at \$25,000: \$50,000.	\$282,500
• Staff Training in Apparatus Maintenance: 4 staff members at \$2,500 each: \$10,000.	
• Lap Tops and Terminals for Fleet Maintenance System: \$25,000.	
The above estimates do not include any deferred maintenance on City owned vehicles which are currently maintained by Rural/Metro. To the extent deferred maintenance exists, it cannot be estimated without	
evaluation of each individual unit. Furniture and Furnishings for Administrative Headquarters:	
Estimated at \$15 per square foot based on facility planning and cost guidelines for space planning and cost estimating for municipal office space. 11,055 square feet at \$15 per square feet.	\$165,825
Financial Services: Payroll system programming adjustments to	
accommodate fire payroll: \$25,000.	\$25,000
Sub-Total Projected Capital Costs	\$5,299,312
Contingency (Estimated at 10%)	529,931 \$5,829,243
PROJECTED CAPITAL COST TOTAL	Φυ, <u></u>

6. OTHER ONE-TIME TRANSITION COSTS WOULD ALSO BE INCURRED.

Other staffing related costs would also be incurred to make a planned transition from contract service from Rural/Metro to an in-house City Fire Department. The next matrix identifies transition requirements and estimates staffing needs associated with each step.

Transition Step	Projected Timing and Required Steps
Educate the citizens and businesses of the City regarding the intended transition from Rural / Metro to a City operated Fire Department. This should include the rationale for making the transition to a City department as well as any anticipated benefits.	Two years before the start—up the City should begin the educational process.

Transition Step	Projected Timing and Required Steps
Recruit and select a Fire Chief. Assumes that an executive recruiter would be retained to assist the City with identifying and attracting candidates and selecting the new Fire Chief. Assumes three months required for the recruitment. Target to have the new Chief on board 12 months prior to service turnover from Rural/Metro.	Eighteen months prior to start-up of City Fire Department and assumption of service responsibility from Rural/Metro.
Fire Chief hired and on board. Add the Executive Secretary to provide clerical/administrative assistance to the Chief.	Fifteen months prior to service transition.
Establish transition team by adding the following staff: • Human Resources Account Consultant to assist with formulation	Within three months, prepare salary and classification plan for fire
of salary and classification plan for uniformed fire staff.	uniformed positions.
• The Budget and Administrative Officer to work with the Chief on budgeting and related matters during the start-up period.	Work with Arizona PERS to develop a retirement plan for uniformed personnel. Target to have established and in place three months prior to service transition and department start-up.

Transition Step	Projected Timing and Required Steps
Priority tasks for this team would include the following:	
 Develop classification and compensation plan for uniformed fire staff – HR Account Consultant working with other Human Resources staff. 	Develop proposed budget for new Fire Department within twelve months of proposed service transition date.
 Work with Arizona PERS to identify alternatives and select a proposal to establish a public safety retirement program for uniformed fire personnel. 	Develop classification and compensation plan for the Department.
 Prepare a proposed operating budget for the first two years of the Department's operations. 	
The Chief would also be responsible for working with the City's top management team to define the following policies related to transition and start-up:	
 Approaches taken to recruit and select current Rural/Metro staff. We have assumed that R/M staff would be recruited but would be dealt with as follows: 	
 Required to pass physical and other examinations required of other new City employees. 	
 Subject to other recruitment and selection policies of the City prior to hire. 	
- Subject to probationary policies and procedures post-hire.	
 Approach to negotiating purchase of Rural/Metro fire related assets (e.g. sedans and SUV's; selected engines; fire station furnishings; and the like to reduce capital costs associated with purchasing new items. 	

Page 47

Transition Step	Projected Timing and Required Steps
An Administrative Secretary to provide clerical and administrative support to the management team.	See above.
The management team would be assigned responsibilities as follows:	
Working with Fleet on apparatus acquisition.	
Working with Information Systems on systems development and implementation.	
Working with the Police Department on communications staffing; radio equipment; and other related matters.	
Developing basic training manuals and procedures for the new department.	
Working with Human Resources on recruiting and selection.	
Hire the additional dispatch staff required to handle fire communications and provide training in fire and police dispatch. This includes:	Either promote an existing staff person or hire a supervisor twelve months prior to transition. Work
• The supervisor would need to be on board twelve months prior to the service transition date.	with the fire transition team to develop training program for new fire dispatchers.
• The nine dispatchers would need to be on board six months prior to the transition date.	

Exhibit IX, which follows this page, shows costs associated with the transition team and related requirements as estimated above. The cost estimate also includes costs for operating expenses and provision of transition office space. The transition team would represent a one-time cost of about \$1.2 million.

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EXHIBIT IX

Projected Salary and Benefit Costs for Transition Management Team

Position	<u>Months</u>	Cost Per <u>Month</u>	Total <u>Cost</u>
Chief	15	8,967	\$134,505
Executive Secretary	15	3,282	49,230
Deputy Chief	12	7,725	92,700
Training BC	12	6,483	77,796
Budget Manager	15	4,816	72,240
HR Account Consultant	15	4,582	68,730
Admin. Secretary	12	2,873	34,476
Battalion Chief	24	6,483	155,592
Dispatch Supervisor	6	4,178	25,068
Dispatcher	54	3,173	<u>171,342</u>
Salary Total Benefits - Uniformed			\$881,679 63,470
Benfits - Non-Uniformed	ł		45,856
Health Insurance			<u>87,300</u>
STAFF TOTAL			<u>\$1,078,305</u>
Operating Expense at 8. Rental Space for Transit Estimated at 3,000 Squa	ion Office		\$74,943
\$1.50 Per Square Foot P			67,500
Chief Recruitment			20,000
TRANSITION TEAM 7	TOTAL		\$1,240,748

Other transition costs would be dependent on the number of Rural/Metro staff who would be hired to become City fire employees. The greater the number of Rural/Metro staff hired, the lower the number of new staff who would need to be recruited, trained and oriented prior to service transition. Transition costs associated with fire staff not included as part of the transition team previously described would be:

- Need for overlap with the Rural/Metro contract to orient new staff and provide basic training related to service assumption; orientation in policies and procedures of the new Department; develop scheduling and assignments; and the like.
- Recruiting and selection costs for all new staff including testing and selection processes for Rural/Metro staff who apply for positions in the City Fire Department.

Since the number of Rural/Metro staff who would transition to a City Fire Department, only illustrative transition costs for overlap related transition costs can be estimated at this time. Our assumptions are as follows:

- All new Fire Department employees, whether currently employed by Rural/Metro or not, would be subject to the basic testing and other selection processes of the City.
- We have assumed that 25% of the Fire Department's employees would not be from Rural/Metro and would undergo a one month transition orientation prior to service transition.

Given these assumptions, Exhibit X, which follows this page shows our estimate of these components of transition costs.

The next table shows estimated total transition costs.

Transition Cost Type	Cost
Transition Team	\$1,240,748
Recruiting and Orientation	\$302,557
Total	\$1.543.305

These costs would increase as the proportion of City Fire Department employees who are transitioned from Rural/Metro decreases.

7. THE OVERALL COST FOR MOVING TO A CITY OPERATED FIRE DEPARTMENT WOULD EXCEED CURRENT EXPENDITURES.

The project team has identified a number of cost elements for the transition from a contract fire agency (Rural / Metro) to a City operated fire department. These costs have included operations as well as capital and finally transition operating costs for the interim period.

The table, that follows, provides a summary of the costs associated with the move to a City operated fire department, taken from above:

Category	60 Hour Week	56 Hour Week	
Direct Department Cost	\$14,731,268	\$16,433,458	
Other City Departments	368,039	368,039	
Annual Operating	\$15,099,307	\$16,801,497	
Cost of Capital	\$5,829,243	\$5,829,243	
Annual Capital Cost *	829,953	829,953	
Total Annual Cost	\$15,929,260	\$17,631,480	
Transition Costs	\$1,543,305	\$1,543,305	
Total Cost First Year	\$17,472,565	\$19,174,785	
FY 00 - 01 Contract Value	\$14,519,052	\$14,519,052	
Operating Variance	\$580,255	\$2,282,445	
Operating / Capital Variance	\$1,410,208	\$3,112,428	
First Year Variance	\$2,953,513	\$4,655,733	

* Assumes 10-year payoff of bonds or loan at 7% tax exempt financing assuming a single payment per year.

This table shows that the estimated cost of making the transition will fall within a range depending on certain policy decisions that are made:

- Operating costs alone (with neither debt service nor transition costs) would range between \$15.1 and \$16.8 million annually.
- The City would only have two realistic options for paying for this transition either out of operating funds or through debt service. The project team has assumed that the City would finance these capital costs using either a bond or some other loan.

- In the first ten years there is an additional \$830,000 in capital debt service to cover the cost of equipment and stations. However, the argument can be made that the City is <u>already</u> incurring these costs as it proceeds with the program of acquiring the capital stock of the fire service (stations and large apparatus) over time.
- Finally, there are additional transition costs that would have to be borne in the first year of the shift from Rural / Metro to a City fire department. These costs have been estimated at \$1.5 million and would be one-time-only costs. However, they are not capital costs and so cannot be capitalized.
- This results in a variance from current expenditures of between \$580,000 and \$3.1 million depending on the policy decision made and depending on how capital costs are compared to current expenses. These figures do not include the transition costs which would be borne in the first year.

This shows that the cost of operating a City-run fire department would exceed the current costs of the contract.

Other Transition Costs

Recruiting and Selection			Cost
Advertising for Recruitment Testing/Selection(182 uniformed staff At \$400 Per Person for Driver's Test and Physical and Psychological Examination	staff Fest and nination		\$15,000
Overlap Orientation			
	Person	Cost Per	Cost
Position	Months	Person Month	Total
Battalion Chief	1.5	\$6,483	\$9,725
Captain	13	4,823	65,699
Firefighter/Paramedic	12.5	4,022	50,275
Firefighter	13.25	3,690	48,893
Salary Total			\$171,591
Fringe Benefits at 13.78% Health Insurance at \$485 per Employee	nployee		23,645 19,521
Staff Fotal			\$214,757
TOTAL			\$302,557

Appendix A

On Apparatus Equipment Cost Estimates

1. Engine.

Equipment	Needed	Cost	Total Cost	Comment
Booster Tank	300 gal	N/A	N/A	Included
Hose: Booster	200'	N/A	N/A	Included
Hose: 1 1/2 inch carried	400'			
Hose: 1 1/2 inch spare	200'	\$2000	\$2,000	
Hose: 2 1/2 inch spare	220'	\$6000	\$6,000	
Heavy Stream Appliance (1000gpm)	1	\$100	\$100	
Distributing Nozzle	1	\$300	\$300	
Foam Nozzle (1 1/2 inch min)	1	\$700	\$700	
Foam Carried	10 gal	\$200	\$200	
Foam Spare	15 gal	\$250	\$250	
Nozzles 21/2 inch playpipe w/ shutoff	2	\$700	\$1,400	
Nozzles: 21/2 inch straight stream & spray	2	\$950	\$1,900	
Nozzles: 11/2 inch straight stream & spray	2	\$900	\$1,800	
Breathing Equipment (30 min. minimum)	4	\$3300	\$13,200	
Breathing Equipment extra cylinders	4	\$840	\$3,360	
Salvage Covers	2	\$120	\$240	
Electric Handlight (4V wet 6V dry)	2	\$ 120	\$ 240	
Hose Clamp	1	\$ 130	\$ 130	
Hydrant Hose Gate (21/2 inch)	1	\$ 420	\$ 420	
Burst Hose Jacket (21/2 inch)	1	\$ 620	\$ 620	
Gated Wye (31/2X11/2X11/2)	1	\$ 300	\$ 300	
Ladder 12 or 14 foot roof	1	\$ 260	\$ 260	
Ladder 24 foot Extension	1	\$ 575	\$ 575	
TOTAL			\$ 33,995.	

2. Truck

Equipment	Needed	Cost	Total Cost	Comment
Large spray Nozzle (500gpm	1	\$ 995	\$ 995	18
minimum	ļ	40000	#10.000	
Breathing Equipment (30 min minimum)	6	\$3300	\$19,800	
Breathing Equipment extra canisters	6	\$ 840	\$ 5,040	
Salvage Covers	10	\$ 120	\$1,200	
Electric Generator (2500 watt)	1	\$ 750	\$ 750	
Flood light (500 watt)	3	\$ 110	\$ 330	
Smoke Ejector	1	\$ 60	\$ 60	
Oxyscetlylene Cutting Unit	1_	\$ 490	\$ 490	
Saw – Power	1	\$ 950	\$ 950	
Electric Handlight (4V wet / 6V dry)	4_	\$120	\$480	
Hose Roller (Equipment Hoist)	1	N/A	N/A	Included
Pike pole (plaster Hook) 6 foot	2	\$ 97	\$194	
Pike Pole (plaster Hook) 8 foot	2	\$110	\$ 220	
Pike Pole (Plaster Hook) 12 foot	2	\$ 135	\$ 270	
Ladder – 10 foot collapsible	1	\$200	\$ 200	
Ladder 14 foot Extension	1	\$ 410_	\$ 410	
Ladder 16 foot Roof	1	\$ 325	\$ 325	
Ladder 20 foot Roof	1	\$ 410	\$ 410	
Ladder 28 foot Roof	1	\$710	\$ 710	
Ladder 35 foot Roof	1	\$ 900	\$ 900	
Ladder 40 foot Roof	1	\$1550	\$ 1,550	
Jaws of Life System (Heavy Duty)	1	22000	\$22,000	
TOTAL			\$51,834	

II. EVALUATION OF THE STRUCTURE OF THE CONTRACT BETWEEN THE CITY OF SCOTTSDALE AND RURAL / METRO FOR FIRE SERVICES

II. EVALUATION OF THE STRUCTURE OF THE CONTRACT BETWEEN THE CITY OF SCOTTSDALE AND RURAL/METRO FOR FIRE SERVICES

In this chapter of the report is provided the project team's evaluation of the current contract with Rural / Metro and potential approaches to take in renegotiating a contract with the firm.

1. <u>STRUCTURE AND CONTENT OF THE FIRE SERVICES CONTRACT</u> WITH RURAL / METRO.

The current contract represents an evolution of a number years of experience between Rural/Metro and the City and each new contract builds on the previous contract(s) for cost increases. Historically and currently, the contract has been structured as a fixed price contract for services as described in the contract. The matrix which follows shows the major cost components of the contract and summarizes our understanding of how year-to-year cost increases are determined.

Contract Component	How Calculated and Increases Determined
Wages	The previous year contract base is the starting point for the wage portion of the contract. The contract calls for increases as follows:
	For base services (excluding any additional positions to provide programs or staff new stations), the previous year wage total is increased by the average of increases granted to fire personnel in the cities of Phoenix, Tempe, Mesa and Glendale for the previous year. This average percent COLA style increase is calculated by the City's Human Resources Department and provided to Rural/Metro following July 1. In the past, the City has authorized and paid for increases to the wage base to address compensation gaps between Rural/Metro fire staff and other municipal fire departments in the Maricopa County area. Major items impacting wage costs such as changes in the base work week, substantial changes in benefit costs, and the like are negotiated outside the provisions of the wage base plus inflator as described above.

Contract Component	How Calculated and Increases Determined	
Wages (continued)	When additional positions are included as part of the budget/contract proposal, the cost of those positions are added to the wage base as follows: For each position, salary cost projected at mid-range based on Rural/ Metro salary ranges for the position(s) being added; benefits and payroll taxes/costs at 20% and allocated administrative overhead at 16% of total salary and benefit costs. If positions are not planned to be in place for the full twelve month period covered by the contract, salary, benefit, and overhead costs are apportioned based on the expected number of months during the year that those positions would be filled and involved in delivering service to Scottsdale.	
Expense	All other expense categories are charged based on the base plus an adjustment percent based on the following as stipulated in the contract: "Other contract charges may be increased up to the amount of the Phoenix Metropolitan Average Annual Four Quarter CPI index as calculated by Arizona State University Center for Business Research. The CPI figure will be determined in January (quarters one through four) of each year. In no case will this amount exceed 7%." The contract also provides that this escalator is subject to the City's ability	
	to pay and the base amount and provides for the following: (1) The escalator amount can be subject to negotiation; and (2) Ability to pay is defined as "the annual percentage increase in contract and commodity accounts in the City Operating Budget, excluding General Fire."	
	Expense increases related to service enhancements above the base amount are negotiated based on cost projections provided by Rural/Metro and addressed during the contract negotiation and budget process.	
	Over the years, Rural/Metro and the City have agreed to various adjustments regarding the composition of the expense base. For example, the Fire Support Group was added to the base at one time, and then deleted from the base based on agreement between Rural/Metro and the City that the City would assume responsibility for costs associated with the Fire Support Group.	
	It is our understanding that when these adjustments have occurred, the base amount for expenses/all other contract costs has been adjusted at that time based on the actual cost of the item being added or deleted based on projected costs for the next budget/contract year and agreement of the parties.	

Contract Component	How Calculated and Increases Determined
Interest and Depreciation	This contract component was established and agreed to approximately 15 years ago. At that time, it is reported that the City was not in a financial position to purchase new fire apparatus and major items of equipment. As a result, the City and Rural/Metro agreed that Rural/Metro would purchase major equipment items and the City would reimburse Rural/Metro for the cost of purchasing and funding major capital items including provisions for purchase cost of major items and the cost of funds invested in those items. It is our understanding that the following provisions apply to all non-disposable items valued in excess of \$500 at the time of purchase.
	• Apparatus and major items are depreciated over 144 months based on straight line depreciation. 80% of apparatus value is depreciated assuming that 20% will be recouped at the time of disposal at the end of the 144 month depreciation period. Net depreciation costs are charged to the City.
	• Interest on un-depreciated net amounts is charged to the City at a rate of 1.04% per month.
Service Fee	The service fee represents is viewed as representing "profit" on the other items noted above. The contract does not speak to the Service Fee; how it is calculated; and the components of the contract to which it applies. Interviews indicate that the service fee has traditionally been added to the contract; includes not only profit but also "recapture" of corporate and group costs which are not charged directly to or allocated within the other contract components. The Service Fee has averaged in the 5.5 % range in recent years. The actual amount of the fee is negotiated during the contract negotiation and budgeting process and is increased based on: (1) Increasing the dollar amount at about the same percentage/rate that the other cost components have increased; and (2) Keeping the amount in the historical 5.5% range.

Once the above amounts are agreed to by major cost component and in total, Rural/Metro is responsible for delivering fire services within the total contract amount for the period specified. While the potential exists for Rural/Metro to request ancillary payments due to unusual circumstances, interviews indicate that this is typically not the case. Interviews indicate that Rural/Metro has requested reimbursement above the fixed contract amount only once and that involved a major wild lands fire situation which occurred in and around Scottsdale.

2. <u>ISSUES ASSOCIATED WITH THE CURRENT CONTRACT</u> STRUCTURE.

The principal issues associated with the current contract structure are as follows:

- Because the contract builds on a historical base, over time, the relationship between the major cost components and the actual costs of providing fire service by Rural/Metro has become blurred. For example, the "fee" amount included in the contract is quite different than the before tax operating margin recorded by Rural/Metro based on review of internal cost accounting documents. This statement is not intended to criticize the operating margin (which is not unreasonable for a private enterprise), but instead, demonstrates the gap between contract cost categories and actual operating practice.
- Because the contract is structured as a fixed price or lump sum agreement, for the City, there is no direct audit trail between funds expended on the contract and how those funds are expended by Rural/Metro. The principal "links" between what the City pays and how Rural/Metro expends those funds and delivers service are some of the performance measures included in the contract such as the requirement that Rural/Metro maintain specified levels of response unit staffing at each of the stations located in Scottsdale.
- As demonstrated in the <u>Profile</u>, Rural/Metro manages and allocates funds through its own internal cost-accounting system to include attempting to allocate resources and control costs so that:
 - Basic performance measures included in the contract with Scottsdale are met (e.g. maintaining minimum response unit staffing at all times).
 - The Scottsdale fire service cost center provides contributions to company overhead costs and before tax operating margins consistent with company targets.

It needs to be clearly understood that we are not faulting Rural/Metro for current cost accounting or contract resource allocation practices. The way the company manages financial resource provided by the contract is totally consistent with the lump sum or fixed price nature of the contract and accepted business practices.

• Nevertheless, the fixed price plus agreed upon escalator nature of the current contract has some implications related to how Rural/Metro needs to manage and allocate resources and deliver services to Scottsdale including the following:

- Forces Rural/Metro to make choices within the contract cost structure such as negotiating a tradeoff between work week reductions and annual salary increases which may or may not be consistent with the "spirit" of past contract negotiations and decisions such as the intent to keep Rural/Metro staff salaries "competitive" with public sector salaries for fire employees in other jurisdictions in the Scottsdale area.
- May encourage Rural/Metro to manage the contract "tightly" and request increases above agreed upon inflators only when internal financial and operating targets are threatened. This may underlie reasons for the absence of some staff resources which we believe are important to fire service delivery such as absence of dedicated staff within Rural/Metro to develop, coordinate, and manage a department-wide training program. This may not be in the City's best interests.
- The contract also sets forth a number of performance requirements for Rural / Metro and the City. These include response time requirements, equipment and training standards, etc.
- The contract also requires information to be provided to the City to enable the City to keep track of Rural / Metro's performance. When Rural / Metro fails to meet the requirements there are sanctions that take effect. These sanctions are paid on a net basis (in some cases Rural / Metro can get credit when they provide resources into the City from resources outside the City).

The next section takes these issues and converts them to recommended approaches to re-negotiating for services with Rural/Metro in a new contract, if the City decided to continue with the company for fire services.

3. RECOMMENDED ADJUSTMENTS TO THE CONTRACT STRUCTURE BETWEEN RURAL/METRO AND THE CITY OF SCOTTSDALE.

As the City and Rural/Metro move forward to review the contract and renegotiate contract structure and amount, we recommend that the following approach be considered to replace the historical approach which has developed over the years and is currently employed:

• Eliminate the historical division of the contract into the cost

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components of wages, expense, interest and depreciation, and service fee to include basing next year's cost for these components based on the previous year's base plus an agreed upon inflator.

- Instead, move to a cost plus fee with an agreed upon not to exceed amount consisting of the following components:
 - Budget by fire service program component with the following recommended components:
 - •• Fire management and Administration: Partially allocated and direct management positions including Fire Chief; Operations Chief; and any support staff.
 - Fire prevention. Fire Marshal and all fire prevention staff.
 - •• Emergency Response: Battalion Chiefs and Captains and below who staff stations and response units covered by the contract.
 - • Fire Training: Includes staff assigned to develop, provide, and coordinate training for Scottsdale fire service.
 - Integrated Fire Group Support: Allocated costs for management and other support staff assigned to Rural/Metro's Integrated Fire Support Group management.
 - •• Corporate Allocations: Other allocated corporate costs.
 - Within each component, budget by basic line item including salaries, benefits, overtime, and other related personnel costs; operating expenses by line item expense category with the exception of vehicle/equipment costs; vehicle operating and replacement costs; and other capital equipment by cost category.
 - Apply to the above an agreed upon percentage for profit.
 - Agree to the above based on a not to exceed contract amount.
- Once established, then bill for service based on the budget components listed above and upon which the basic contract service is based.

If adopted, the simple structure outlined above will accomplish the following:

- Directly relate funds expended to the purposes for which they

were paid, and in this context, provide the City a clear audit trail and allow Rural/Metro to present and justify program modifications as direct portions of the budgeting and contract negotiation process.

- On a continuing basis, allow the City to evaluate, on a program and item basis, what services costs, providing the basis for periodic decisions on which services and cost components might be more cost-effectively provided as a direct City rather than contract service.
- Enable Rural/Metro to negotiate and receive a fair return for services provided without having to restrict or defer expenditures related to key services and operating needs.
- The contract should continue to stipulate that there will be payment made monthly. These payments should be made in two parts:
 - General operating costs should be paid after a basic review of the services provided (i.e., is Rural / Metro providing the service or not?) and are costs consistent with the budget and financial agreements. To avoid having Rural/Metro having to fund services in advance of payment, the City could "advance" one month's payment at the beginning of the contract year and then pay one month in "arrears" as subsequent invoices are received.
 - The profit portion of the payment should be made only after the City is satisfied that Rural / Metro has performed according to the performance measures established by the City. There are two approaches for paying the profit portion of the agreement:
 - Pay the profit amount monthly and adjust quarterly based on Rural/Metro's performance against agreed upon performance standards.
 - •• Pay the profit amount quarterly including any adjustments based on Rural/Metro's performance against agreed upon performance standards.
- MAXIMUS believes that some modifications should be made with regards to the way in which the contract evaluates performance of Rural / Metro in the City of Scottsdale. The purpose of these changes is to move the City staff away from handling large volumes of data and to improving the overall accountability of Rural / Metro for the services it is to provide. Specifically, the project team recommends the following changes:

- The Contract should continue to contain specific performance measures. However, the language should be flexible enough to allow for changes to the service delivery approaches as desired by the City (as if the contract were defining the relationship between the City and one of its departments, as described, above).
- Conduct performance reviews on a quarterly rather than a monthly basis. This should be done at an operating unit level.
- Revise how performance is evaluated, moving from analysis of each individual incident to a more general consideration of performance compared to standards as follows:
 - Response Times for Code 3 Calls: Set a target of meeting standard 90% of the time and review/monitor performance by geographic area of the City to reflect differences in travel distances, station locations, and population distribution.
 - Training: Rather than track "hours" of training, set some simple expectations as follows that are probably more closely linked to training effectiveness such as:
 - For the specified period, have 100% of engine and truck companies successfully complete fire ground performance tests.
 - Maintain paramedic certification for "X" percent of suppression personnel.
 - Maintain Firefighter I (or appropriate level) certification for "X" percent of suppression personnel.
 - •• Fire Prevention: Complete "X" percent of inspections scheduled for the period with inspections differentiated between:
 - Higher hazard occupancies inspected by prevention inspectors.
 - Company or "B" occupancy inspections.

Inspections should also be reviewed annually to ensure annual frequency targets by occupancy type are met.

• • Vehicle Maintenance:

- Complete "x" percent of preventive maintenance inspections within hourly/mileage limits.
- Conduct pump testing for 100% of the units annually.
- Limit apparatus down time to "x" percent.

This would eliminate the laborious monthly project that occurs currently — with City staff reviewing dozens of calls for service to determine if there is an "exception" which allows Rural / Metro to legitimately fail to perform up to the standard. Rather, the two parties would agree to the performance standard in advance with only unforeseeable circumstances (i.e., a plane crash, massive urban / wildland interface fire, etc.) allowing for negotiation regarding Rural / Metro's ability to perform to standard.

- There are then two approaches that could be used to penalize or reward Rural / Metro for its performance (the mechanics of each approach are summarized in the table that follows the three dot points, below):
 - In the first approach, the City could continue to utilize the disincentive of financial penalties when Rural / Metro fails to meet a particular performance standard. MAXIMUS recommends this approach as it is something that the City and Rural / Metro have experience with (from past agreements) and have generally been comfortable with.
 - In the second approach, the City would reward Rural / Metro when they exceed a performance standard.

Approach	Penalty Clause	Incentive Clause	
Measurement of Performance	 Performance against pre-set standards. Done at a major unit or program level. Focus on the automated provision of this information in a timely manner. 	 Performance against pre—set standards. Done at a major unit or program level. Focus on the automated provision of this information in a timely manner. 	
Review Process	 Rural / Metro provides performance data. The City then reviews, in detail, several of the program areas to ensure the accuracy of the data. 	 Rural / Metro provides performance data. The City then reviews, several of the program areas to ensure the accuracy of the data. 	

Approach	Penalty Clause	Incentive Clause
Determination of Impact	 Failure to meet the standard results in forfeit of all profit associated with that element of service. This could be taken down to the individual unit level (i.e., portion of programs). No incentive for exceeding minimum performance standards. 	 Failure to meet the standard results in forfeit of all profit associated with that element of service. This could be taken down to the individual unit level (i.e., portion of programs). When performance has exceeded the standard, an incentive clause would kick in for that unit. Profit levels should be separated but should not cause new expenditures to drastically exceed current expenditures.
Exchange of Funds	 City pays Rural / Metro its profit number one month in arrears. Typical profit or "excess revenue" clauses would limit total profit to a portion of the contract value for a given period of time. 	 City pays Rural / Metro its profit number one month in arrears. Typical profit or "excess revenue" clauses would limit total profit to a portion of the contract value for a given period of time.
Other Issues	 Continue to present similar accounting challenges to Rural / Metro as they face now. City knows the maximum liability in terms of profit it will pay – and the City reaps the savings in financial terms. 	 Continue to present similar accounting challenges to Rural / Metro as they face now. City knows the maximum liability in terms of profit it will pay – and the City reaps the savings in financial terms. Incentives may cause Rural / Metro to provide innovative and improved services.

• Regardless of the approach taken, the project team recommends that performance be assessed quarterly and performance adjustments be deducted from the profit amount at that time (or added to if the incentive approach is taken).

This concludes the project team's analysis of the contract between the City of Scottsdale and Rural / Metro.

4. THE NEXT STEPS TO BE TAKEN BY THE CITY INCLUDE NEGOTIATION AND CONTINUING TO PLAN FOR TRANSITION TO A CITY FIRE DEPARTMENT.

This section provides a brief summary of the steps that MAXIMUS believes the City needs to take in the coming year or so. The project team recommends that the City take the following actions as these negotiations approach and are addressed:

- Continue negotiating with Rural / Metro with the intention of signing a contract for continued fire services by the vendor for the next three five years.
- Continue with the current practice of moving the City towards the ownership of all major rolling stock (i.e., fire apparatus), facilities (i.e., stations) and so on. This should be viewed as a necessary step towards eventual City provision of these services.
- The City should also move towards enhancing the delivery of training of the personnel in the City of Scottsdale by requiring a higher level of station training (and the resulting record keeping). This should be accompanied by a real internal effort to address the establishment and measurement of performance against operating goals for staff and managers in areas of operational performance.
- Changes to the contract should be pursued. These should include the following major items:
 - Alter the relationship between the City and Rural / Metro in terms of setting budgets, priorities and so on. The new approach should be seen as an annual fixed price plus contract – with the prior year no longer serving as the basis for the new year's contract.
 - Move to a more generalized performance standard approach for all areas of performance. This will eliminate the mechanical evaluation of large numbers of calls – and will position the City so that it can conduct true evaluations of programs and service provided by Rural / Metro.
- Develop a plan of action with Rural / Metro with respect to implementing the other recommendations included in this and the other report.

There are a number of steps that should be taken – some of which need to be included as part of the negotiations with Rural / Metro. The Appendix, that follows, provides a summary of the best practices evaluation of Rural / Metro.

MAXIMUS Page 64

APPENDIX

BEST PRACTICES EVALUATION OF FIRE AND EMERGENCY MEDICAL SERVICES PROVIDED IN SCOTTSDALE BY RURAL / METRO

Best Practices Evaluation of Fire and Emergency Medical Services Provided in Scottsdale by Rural Metro APPENDIX

Fire and Emergency Medical Services Component	Best Practice	Current Annroach in Scottsdele
Fire Station Location and Response Unit Deployment		Caroning to a constant
Fire service area coverage	Locate, build, and staff fire stations to keep developed areas of the City service area within response time targets of four to six minutes for the first responding unit for emergency fire and medical calls. Assuming an average travel speed of 25 miles per hour for units responding in a "Code 3" mode (lights and sirens), maximum response distance for a station response area is then in the 1.2 to 2.0 mile range allowing one minute following dispatch for crew readiness and "roll-out" and three to five minutes for actual travel to the scene.	The contract performance targets for fire and emergency medical service do not establish quantitative standards related to station response areas and community coverage. Instead, as noted below, the targets set response time performance standards/expectations by station response are to reflect differences in development density and levels of built-in protection in the various areas of the community. The FLAME analysis conducted by the project team indicates that, given current station location and community configuration:
		• South Scottsdale: About 56% of the portion of the City (i.e., south of Frank Lloyd Wright) is located within a 4-minute response area of a current fire station. The remainder of the area involves response times of four to six minutes (37%) and six to eight minutes (7%). Very little of this area is outside of an 8-minute response

Page 65

MAXIMUS

Fire and Emergency Medical Services Component	Best Practice	Current Annroach in Scottsdele
Fire service area coverage (continued)		North Scottsdale: This is the area which generally lies above Frank Lloyd Wright
		in less than eight minutes (and there are some areas which lie outside this outer response time limit), 42% can be reached in four minutes or less another 40% can be reached in four minutes or
		minutes and 18% can be reached between six and eight minutes.
		Not all areas of the north end of Scottsdale can be reached in eight minutes or less from the current configuration of fire stations and units.
		Overall, the FLAME map analysis indicates that much of the City is located beyond the four
		minute and six minute response time coverage limits generally associated with comprehensive
		ire unit response time coverage.

Current Approach in Scottsdale	The contract establishes different first-in unit response time standards for the various areas of the City which reflect level of sprinklering/ built-in protection and development/population density in those areas. Targets range from 90% of calls within 4 minutes or less for the Station 810 and 811 response areas; 90% of calls within 5 minutes or less for the Station 812, 813, 814, and 815 response areas; and 90% of calls within 7 minutes for the Station 812 within 7 minutes for the Station 818 and 819 response areas. In general, considering built-in protection in the more newly developed areas, current targets are consistent with national standards and research results involving efficacy of fire response and fire suppression capabilities of first in units.
Best Practice	Four to six minute response time for first responding unit for 80% to 90% of structure fire calls. Response time targets are directly related to designing a fire protection system which can attack structure fires prior to "flashover" that point when all of the combustibles in a confined area will ignite simultaneously as a result of temperature increase in a fire. Flashover normally occurs between 6-1/2 to 10 minutes after ignition with structural damage increasing as the fire grows in a more or less geometric progression. Response time targets can be modified based on built-in protection such as sprinkle ring which can control fire spread and temperature if activated.
Fire and Emergency Medical Services Component	Response Time to Structure Fire – First In Unit

Fire and Emergency		
Medical Services		
Component	Best Fractice	Current Approach in Scottsdale
Response Time to Structure Fire – Full Structure Fire	Deliver a minimum of four units (two engines, a rescue and a truck) with at least twelve personnel	The contract sets performance targets for a full structure fire response which establish fire flow
Response Including Personnel and Apparatus	with a response time for all responding units of 12 minutes.	targets and total responding personnel for a
Response to a Structure Fire		(reflecting differences in development, density, and
	Response times for additional units (engines and	levels of built-in protection across the City) as
	trucks) is also important since the speed with which	follows:
	additional staff resources can be delivered to the fire	
	scene to accomplish fire control and suppression	 Twelve personnel and a Battalion Chief for a
	activities impacts total ability to control fire spread.	structure fire in the Station 810 and 811
		response areas.
	Effectiveness standards generally involve the	
	following related to the above:	 Nine personnel and a Battalion Chief for a
		structure fire in other Station response areas.
	 Delivering a full structure fire response to the 	
	fire scene within 8 to 12 minutes of receipt of	These standards are generally consistent with
	report of the incident at the communications	industry standards/best practices.
The second secon	center.	•

Fire and Emergency Medical Services Component	Best Practice	Current Approach in Scottsdale
Response Time to Structure Fire – Full Structure Fire Response Including Personnel and Apparatus Response to a Structure Fire	• This involves the first in engine company within four to six minutes; a second engine within 6 to 8 minutes; and a truck company within 8 to 12 minutes.	Units are currently staffed, deployed, and dispatched to provide a response capability consistent with these targets and industry standards/best practices.
(continued)		Contract performance targets do not specify response and arrival at the scene time targets for additional responding units in a structure fire situation. Furthermore, available data did not
		support analysis of actual arrival performance compared to targets and standards for the full structure fire response. The FLAME analysis also evaluated station and response time coverage for a
		full structure fire response. The map analysis evaluated station coverage from the perspective of providing a 12 person response City-wide within eight minutes and twelve minutes. Findings were
		as follows: Percent of Area
		Full Response Full Response Area Within 8 Minutes
		South 61 % 93 % North 0 % 42 %

Fire and Emergency		
Medical Services Component	Best Practice	Current Approach in Scottsdale
Response Time to Structure Fire – Full Structure Fire Response Including Personnel and Apparatus Response to a Structure Fire (continued)		From the map analysis perspective, the current station network is not configured nor units deployed to provide a full structure fire response within the 8 to 12 minute range associated with industry standard best practice (in all areas of the City).
Command System for Major Fire and Emergency Incidents	Battalion command staff and company officers trained in Incident Command System (ICS) or comparable approach for structuring and exercising command and supervision at the fire or emergency incident scene. Includes periodic conduct of training exercises in ICS including incident simulation.	Rural/Metro participates as a member of the Regional Operating Consistency Committee which has developed a uniform incident command system similar to ICS. Battalion Chiefs and Captains have been trained in the command system adopted as a regional standard and follow this approach during incidents (confirmed by listening to radio calls).
Emergency Medical Services		Compression with Desir practices.
Response Capability for Emergency Medical Incidents	Major trend across the United States to expedite ALS response by training and certifying engine company personnel as Fire Fighter/Paramedics and providing ALS capabilities on first-in engine company response units.	Rural/Metro provides a two tiered response to emergency medical calls which includes an initial response by the closest engine company, each of which is staffed with at least one Firefighter/ Paramedic who is trained to provide ALS level services, and a rescue ambulance staffed with a Firefighter EMT and a Firefighter Paramedic.
		best practices.

Fire and Emergency Medical Services Component	Best Practice	Current Approach in Scottsdale	n Scottsdale
Response Times for Life Threatening Emergency Medical Incidents	Response times for emergency medical calls for service as follows: (1) BLS (basic life support) response within 4-5 minutes for 80%-90% of calls; and (2) ALS (advanced life support) response within 6-8 minutes for 80%-90% of calls. ALS response/ service within 8 minutes has been determined by the American Heart Association to significantly increase survivability of heart attack victims.	The fire service contract with Rural/Metro provides for the following response time targets for emergency medical incidents: (1) Have an ALS capability on scene within the following parameters Targets range from 90% of calls within 4 minutes or less for the Station 810 and 811 response areas; 90% of calls within 5 minutes or less for the Station 812, 813, 814, and 815 response areas; and 90% of calls within 7 minutes for the Station 818 and 819 response areas; (2) Have a second ALS capability unit on scene within 8 minutes; and (3) One of the ALS units must be a transport unit. Based on review of actual response time performance for the period July 1, 2000 through June 30, 2001, actual response time for first in units was as shown below compared to targets.	ural/Metro provides targets for (1) Have an ALS ollowing parameters lls within 4 minutes 111 response areas; r less for the Station areas; and 90% of tation 818 and 819 and ALS capability and (3) One of the unit. Based on performance for the ne 30, 2001, actual was as shown below
		Response Time Station Target (90%)	Actual <u>Performance</u>
		810 90% w/in 4 min Minutes	2.85 / 4.02 4 min / 5 min
		811 90% w/in 4 min Minutes	3.48 / 3.50 4 min / 5 min
		812 90% w/in 5 min Minutes	4.88 / 5.55 5 min / 7 min

Fire and Emergency Medical Services				
Component	Best Practice	Cn	Current Approach in Scottsdale	sdale
Response Times for Life Threatening Emergency Medical Incidents (continued)		Station (90%)	Response Time <u>Target</u>	Actual Performance
		813	90% w/in 5 Minutes	3.52 min
		814	90% w/in 5 Minutes	2.83 min
		815	90% w/in 5 Minutes	3.25 min
		816	None Specified In Contract	4.83 min
		818	90% w/in 7 Minutes	6.32 min
		819	90% w/in 5 Minutes	4.25 min
		820	None Specified 6.73 min In Contract	ii
		The data sh performanc standards s and the City	The data shown above indicate that actual response performance for first in units is well within the standards set by the contract between Rural Metro and the City of Scottsdale.	tual response Ithin the Rural Metro

Medical Services Component	Best Practice	Current Annroach in Scottsdele
Support "Self-Help" Emergency Medical Service Programs	Implement and support citizen "self-help" programs in the emergency medical services area such as locating defibrillators in high risk areas and providing CPR training to community residents and businesses.	Rural/Metro has located defibrillators at some convalescent homes in the community and trained care personnel in their use. Rural/Metro also provides CPR classes throughout the community on a monthly basis and over the period July, 1999 through May, 2001 certified an average of 22 persons monthly in CPR
Apparatus Replacement and Renewal and Maintenance		Problem invitability in O. 10.
First line apparatus life cycle.	Remove engines from first line status after twelve years' service and trucks after fifteen years.	Current practice is in transition since the City of Scottsdale is now in a program to own apparatus versus the previous approach under which Rural/Metro purchased and owned apparatus and depreciated apparatus cost as part of annual contract charges. Review of the first line apparatus trucks are newer than the replacement targets indicated by best practice.
Apparatus Maintenance	Clearly established/defined maintenance schedule and tasks for accomplishment by company level personnel.	The maintenance personnel have provided each company / station with clear guidelines for performing vehicle checks and for performing basic tasks themselves. Rural Metro also makes available mobile units to provide maintenance in the field (to reduce travel and down time for emergency units). The project team does not recommend that the City take over vehicle maintenance of fire units unless the contract with Rural / Metro is terminated due to the special nature of the skills required to maintain pumps and other special equipment.

Best Practice	A to
	Current Approach in Scottsdale
Computer Aided Dispatch(CAD) with automated geo-files and "run maps" / protocols for use by the fire communications center.	Rural/Metro fire communication/dispatch center equipped with CAD system consistent with best practices.
On-board terminals in first response apparatus to provide visual display of dispatch/response instructions and print-out capability for run map/incident location.	Response vehicles are equipped with radios only and do not have computer (CRT) or visual display terminals (VDT). Battalion Chiefs also have no access to CRT's or VDT's in their vehicles. Response unit notification by tone out and pager with instructions provided by radio.
	As noted above, Battalion Chiefs do not have computer terminals in vehicles. All information related to response (e.g. units dispatched and projected arrival sequence) provided verbally over radio by dispatchers.
	Current access of Battalion Chiefs and response units to automated incident, run, and other information and approaches for providing that information not consistent with best practices.

Fire and Emergency Medical Services Component	Best Practice	Current Approach in Scottsdale
Emergency Medical Dispatch	Dispatcher access to and training in soliciting information related to the emergency medical incident and providing pre-arrival instructions to responding fire and EMS units. Includes use of one of the systems (e.g. Clausen System) which provides structured questions and related instructions for dispatchers to use in soliciting information and providing pre-arrival instructions to responding units.	Rural/Metro currently employs the Clausen system to develop information and provide pre-arrival instructions for responders to emergency medical calls. Currently evaluating potential to develop proprietary system as an alternative. Consistent with best practice.
Inter-agency communications compatibility	Response units and field incident commanders can communicate directly with other fire agencies in the event of mutual aid incidents, and with other public safety units like police officers.	Currently, the communications system utilized by Rural/Metro does not provide for direct communication by units in the field to Scottsdale police officers. The Scottsdale Police Department utilizes an 800 MHz system which is incompatible with the Rural/Metro system. To the extent that communication is required on emergency incidents, information is transmitted to Rural/Metro dispatchers, then to the Scottsdale PD via land line, and then relayed by Police Department dispatchers to police officers in the field. Phoenix Fire Department is also implementing an 800 MHz system which will also make communications between field units of Rural/Metro and Phoenix on mutual aid calls impossible.
		Not consistent with best practice.

Fire and Emergency Medical Services Component Fire Prevention and Inspection	Best Practice	Current Approach in Scottsdale
New Construction Plan Check and Inspection	Dedicated fire specialists to review and analyze new construction/remodeling plans for conformance with the Fire Code and the City's fire protection related codes and ordinances.	Rural/Metro provides dedicated fire prevention specialists who work as integral components of Scottsdale's development review process. All required plans checked by specialists.
	Field inspection of new construction and required fire systems by trained fire specialists integrated with other construction inspections and successful completion required before issuance of occupancy	Fire prevention specialists conduct all new construction inspections and the City requires completion of a successful inspection before a Certificate of Occupancy is issued.
		Consistent with best practice.
Codes and Ordinances	Adopt and maintain most current version of the Uniform Fire Code.	The City adopts the most current version of the Uniform Fire Code (UFC), and as noted below, has additional ordinances which require built-in protection with more stringent requirements than most jurisdictions.
1.79		Consistent with and generally exceeds best practice.
Built-In Protection Requirements	Require sprinklering in all new commercial/industrial occupancies and residential units. Retrofit required for commercial/industrial remodels exceeding 50% of value	Ordinances dealing with built-in protection significantly exceed industry standards and best practices:
		 All new residential construction must be sprinklered (requirement in place since 1986).

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Medical Services Component	Best Practice	Current Annuoush in Constants
Built-In Protection Requirements (continued)		All new commercial and industrial building must be sprinklered, and sprinkler systems are required to be installed/retrofitted in all commercial and industrial buildings which are remodeled.
		• Residential structures being re-modeled with the remodel effecting 25% of the structure must also be retrofitted with sprinkler systems.
Coordination with Other Municipal Planning and Land Use Control Units	Fire prevention specialists located and work in conjunction with other development review staff to provide customer convenience for applications and application instructions.	Rural/Metro fire prevention staff are stationed at the Scottsdale Development Review center and are co-located with the City's other development review staff.
	Fire prevention staff participate as member(s) of application review teams and pre-application conferences for major projects to ensure fire safety considerations addressed for all major projects.	Rural/Metro fire prevention staff participate as integral members of various pre-application review committees established by the City, and fire prevention staff are fully integrated into the development review and permit processes of the City.
de l'action de la constitución d		Consistent with best practices.
Hazard Inspection and Code Enforcement	At minimum, annual inspection of high risk occupancies by specialist fire inspectors.	The Rural/Metro fire prevention unit which serves Scottsdale has designed and implemented a
	Scheduled annual fire safety inspections of all risk commercial/industrial occupancies by engine/truck companies. Central coordination by fire prevention staff to ensure engine/truck company inspections are completed at least annually.	comprenensive safety inspection code enforcement program which provides for annual inspections of all high hazard and complex occupancies by fire prevention specialists on an annual basis.

Fire and Emergency Medical Services		
Component	Best Practice	Current Approach in Scottsdale
Hazard Inspection and Code Enforcement (continued)		Lower risk occupancies inspected annually by engine companies.
		Fire prevention staff monitor completion of required inspections by specialists and engine companies.
Training and Staff Development		Consistent with best practices.
In-Service training for fire suppression and emergency medical services staff	Structured in-service training program for fire suppression staff assigned to response units to include the following:	Current training approaches/requirements employed by Rural/Metro compare to the best practices noted at left as follows:
	 Annual training schedule clearly outlining training expectations by subject and hours devoted to each. 	 Currently, central training staff available to develop and manage training programs for fire personnel is limited to one District Chief who is
	• Documented performance standards to be met by response personnel by position and type of unit to provide a basis for company training and proficiency assessment.	assigned to the Resource Management Unit. This position defines annual training expectations which need to be met by company captains in terms of general areas to be covered and number of training hours which are to be
	 Central monitoring of actual training provided and completed by companies to include centrally maintained training records to document training provided and completed by all staff. 	completed. While training hours are reported to and tracked by the Resource Management Unit, hours completed by subject/topic for each company are not reported nor tracked by the

Fire and Emergency		
Medical Services		
Component	Best Practice	Current Approach in Scottedalo
In-Service training for fire suppression and emergency medical services staff (continued)	• Annual proficiency testing of fire fighters compared to documented and established performance standards.	Resource Management Unit. As a result, there is little central/control of training focus, content, and quality actually conducted at the company level with the exception that training and certifications involving safety (e.g. blood borne pathogens) and emergency medical service qualifications are now tracked by subject and employee by the OSHA compliance officer. Based on the above, the basis for training continuity between and among companies are the IFSTA manuals which are employed by the Department and provided to each company as the basis for skills maintenance.
		While company performance standards are documented, there is no current process to uniformly measure competency and performance against these standards, nor any central control to ensure that companies are training to these standards on a uniform basis.
		Some steps have been taken to upgrade in-service training through establishment of a Labor – Management Committee which has been tasked with identifying specific training topics and based on committee recommendations, providing special training topics on quarterly basis which are available to all companies. Topics are presented two times per week for a three month period and company officers are responsible for having their
		companies attend. There are indications that some staff cannot attend these special topics because of assignment to high demand units.

Medical Services		
Component	Best Practice	Current Approach in Scottsdale
In-Service training for fire suppression and emergency medical services staff (continued)		Overall, the in-service training program should be viewed as minimal and the absence of central control to ensure consistency across the companies and battalions as well as limited resources available to plan and monitor training should be viewed as a weakness.
		Not consistent with best practices.
Unit proficiency testing	At minimum, semi-annual multi-company drills and proficiency testing in fire ground techniques/performance.	Battalion Chiefs currently conduct multi-company drills during most days and during the non-summer months. These drills are conducted at least twice quarterly for each company. While frequency of the multi-company drills is consistent with and in fact exceeds best practices, there is no formal proficiency testing of companies, either individually or in multi-company settings, and this is inconsistent with best practices.
Dedicated training staff for	Sufficient dedicated staff to develop, distribute, and	There is no formal management or supervisory
program management and development	ensure compliance with annual (or more frequent master training schedule. Also, central	development program currently in place.
-	maintenance/monitoring of training records.	With the exception of the special quarterly topics identified by the Lahor Management Committee
	Provision of training videos and other self-teaching materials for use in station level training.	there are no special training materials acquired or prepared centrally and made available to the stations to support company training
		continue of happens company or attitude.

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Directory Directory		
Medical Services		
Component	Best Practice	Current Approach in Scottsdale
Dedicated training staff for program management and development (continued)		Not consistent with best practices.
Reserve or comparable program to train, qualify and attract fire fighters.	Formal program to provide opportunities for reserve or other fire fighters from whom full-time staff can be recruited.	Rural/Metro operates a significant reserve program with about 80 reserves for the Maricopa County fire operation of which about 40 are involved in the Scottsdale and Paradise Valley fire service system.
		Reserves are required to achieve Firefighter II/EMT qualification and meet the basic company performance standards before they are used to work shifts. Shift Captains are assigned responsibility for coordinating a specified number of reserves (about 20 each) including arranging for ands providing for in-service training for recording or and or service training for recording to the service training for
		reserves meet minimum company performance standards.
Management and Organization		Consistent with best practice.
Line command span of control	Battalion Chief span of control in six to eight station range.	The Scottsdale service area is structured into two battalions with battalion chiefs overseeing
		Scottsdale periphery including Station 828 (Paradise Valley); 821 (Cave Creek); 825 (Rio Verde); and 840 (Del Webb - Anthon) The group of control of the
		north and south battalion chiefs (as measured by the number of stations supervised) are as follows:

Fire and Emergency Medical Services Component	Best Practice	Current Approach in Scottsdale
Line command span of control (continued)		South Battalion Chief: 1:7 span of control.
	,	• North Battalion Chief: 1:7 span of control.
		At these levels, Battalion Chief spans of control are within the effectiveness ranges associated with industry standards for best practice.
Levels of management	Organization "flattened" to reduce levels of management involved in direct service delivery.	Because of the Rural/Metro system for serving Scottsdale as part of the Maricopa County fire service delivery system, levels of management and the number of dedicated management and administrative positions devoted to managing the fire service system are modest. Based on information contained in the Profile, Scottsdale pays for the equivalent of 5.8 management positions (Battalion Chief through County Fire Chief). A comparably sized municipal fire department in the Western United States would staff a minimum of 10 management positions from Battalion Chief through Chief of the Department. Consistent with cost-effective practice and in line with current approaches to flattening municipal